DOCUMENT RESUME

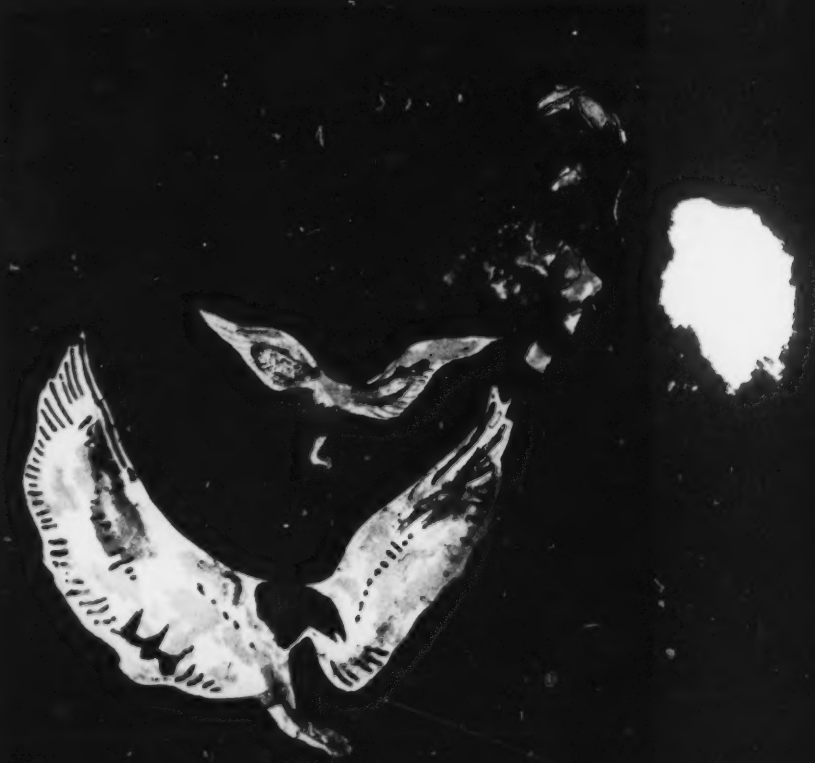
ED 374 213 CE 067 023

TITLE	Social Change and Adult Education Research. Adult Education Research in Nordic Countries 1992/93.
INSTITUTION	Linkoping Univ. (Sweden). Dept. of Education and Psychology.; Norwegian Inst. of Adult Education, Trondheim.; Royal Danish School of Educational Studies, Copenhagen (Denmark).; Tampere Univ., Hameelinna (Finland). Dept. of Education.
REPORT NO	ISBN-82-7262-092-8; ISSN-1102-8351
PUB DATE	94
NOTE	258p.; For the 1990/91 edition, see ED 351 510.
PUB TYPE	Collected Works - General (020) -- Books (010)
EDRS PRICE	MF01/PC11 Plus Postage.
DESCRIPTORS	*Adult Education; *Adult Learning; Adult Literacy; Continuing Education; Distance Education; Dropouts; Educational Legislation; Educational Needs; Educational Policy; *Educational Research; *Education Work Relationship; Employment Patterns; Employment Qualifications; Foreign Countries; Illiteracy; Independent Study; Information Technology; *Job Training; Labor Force Development; Learning Motivation; Learning Processes; Models; Participation; Slow Learners; *Social Change; State of the Art Reviews; Yearbooks
IDENTIFIERS	European Community; Mezirow (Jack); *Nordic Countries; Popular Education

ABSTRACT

This yearbook contains 18 papers reflecting the major trends in adult education research in the Nordic countries in 1992-93. The following papers are included: "Popular Adult Education and Social Mobilization: Reflections in Connection with the Swedish Committee on Power" (Rubenson); "Direction of Finnish Adult Education Policies within the Context of European Integration" (Pantzar); "Managers of Their Own Life and Learning: An Evaluation of a Euroform Project for Long-Term Unemployed Professionals Aiming at Mobility in Europe" (Manninen); "Trends in Employer-Funded Training as an Indicator of Changes in Employment: The Case of Norway in the 1980s" (Gooderham, Hines); "Human Capital: Who Invests and Why?" (Sand); "Learning at the Workplace: An Industry in Change" (Thang); "Educational Needs and Demands of Danish Workers as Reflected in the Curricula of the Act on Adult Educational Grants (the VUS)" (Ehlers); "Qualification and Work; Basic Concepts and Danish Research" (Olesen); "Change of Perspective in Qualification Analysis; Presentation of a Search Model" (Ulriksen); "Working Together: Motivation, Goals, and Volition" (Dahl); "Relationship between Work and the Learning Process in Adult Education" (Hoyrup, Scavenius); "Domination or Self-Control? Images of Participation, a Review of Research" (Hultman); "From Self-Directedness to Interdependence? An Analysis of Mezirow's Conceptualization of Self-Directed Learning" (Ahteenmaki-Pelkonen); "Evaluation of a New Education for Shop Stewards" (Wahlgren); "As Teachers See It--Why There Are Dropouts from Continuing Education Programs for Adults. What Teachers Know" (Madsen); "Out-of-School Processes of Knowledge Constitution" (Llorente); "Slow Learners" (Andersson, Dyekjaer, and Wandall); and "From Information Technology to Thrilling Sources of Learning" (Grepperud). (MN)

ED 374 213



BEST COPY AVAILABLE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C Holmberg

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Social Change and Adult Education Research

Adult Education Research in Nordic Countries 1992/93

Editorial board:
Sigvart Tøsse, Norway
Bjarne Wahlgren, Denmark
Jyri Manninen, Finland
Maj Klasson, Sweden

Trondheim 1994

3

Printing sponsored by The Norwegian Institute of Adult Education, Norway; Research Center for Adult Education, Denmark; Ministry of Education, Finland and The Swedish National Agency for Education, Sweden and Mimer - National Program for Adult Education Research, Sweden.
We thank them all.

Front page illustration: Håkon Bleken, born: Trondheim 1929
From Haugtussa (poem by Arne Garborg)

Håkon Bleken belongs to the leading group of contemporary Norwegian artists. He is primarily a painter, but has probably distinguished himself most of all with his charcoal drawings. He has also been preoccupied with graphic art, particularly lithographies.

Bleken's art highly reflects his need to express man's passions and the existential conditions under which he lives. This has led the artist to search in literature and social history for the solution to the mysteries of human life.

Taking his point of departure in life itself and in the works of writers such as Thomas Mann, Franz Kafka, Knut Hamsun and Arne Garborg, Håkon Bleken is a Norwegian and a European at the same time.

With great talent and commitment his art speaks to us in a powerful visual form about the vulnerable individual combating all forms of oppression and misuse of power.

Distributed by:

Linköping Adult Education Research Group, Departement of Education and Psychology, Linköping University, S-581 83 Linköping, Sweden
Department of Education, University of Tampere, P.O. Box 607, SF-33101 Tampere, Finland
The Norwegian Institute of Adult Education (NVI), Jonsvannsveien 82, N-7035 Trondheim, Norge
Research Center for Adult Education, Department of Educational Research, The Royal Danish School of Educational Studies, Emdrupsvej 101, DK-2400 København K, Denmark

ISSN 1102-8351
ISBN 82-7262-092-8

Printed in Norway by Tapir, Trondheim 1994

Contents

To the Reader 3

ADULT EDUCATION POLICIES IN THE NATIONAL AND EUROPEAN CONTEXT

Kjell Rubenson — Popular Adult Education and social Mobilization: Reflections in Connection with the Swedish Committee on power 6

Eero Pantzar — Direction of Finnish Adult Education Policies within the Context of European Integration 20

Jyri Manninen — Managers of their own Life and Learning An Evaluation of an Euroform Project for long term unemployed Professionals aiming at Mobility in Europe 32

WORK, TRAINING AND JOB-RELATED EDUCATION

Paul Gooderham — Trends in Employers funded training as an Indicator of Changes in Employment. The Case of Norway in the 1980s 46

Roald Sand — Human capital: Who invests and why? 65

Per-Olof Thång — Learning at the Work-place An Industry in Change 80

Søren Ehlers — The Educational Needs and Demands of Danish Workers as reflected in the Curricula of the Act on Adult Educational Grants (the VUS) 91

QUALIFICATION AND WORK

Henning Salling Olesen — Qualification and Work Basic Concepts and Danish Research 104

Lars Ulriksen — Change of Perspective in Qualification Analysis Presentation of a Search Model 114

5,

LEARNING PROCESSES

Tove Dahl	Working Together: Motivation, Goals and Volition	132
Steen Høyrup and Camilla Scavenius	The Relationship between Work and the Learning Process in Adult Education	146

PARTICIPATION, DROPPING OUT AND SELF-DIRECTEDNESS

Glenn Hultman	Domination or Self-Control? Images of Participation, a Review of Research	156
Leena Ahteenmäki-Pelkonen	From Self-directedness to Interdependence? An analysis of Mezirow's Conceptualization of self-directed Learning	173
Bjarne Wahlgren	Evaluation of a new Education for Shop Stewards	184
Bjørn-Emil Madsen	As Teachers See It - Why Are Drop-Outs from Continuing Education Programmes for Adults. What Teachers know	190

THE ILLITERATES AND THE SLOW LEARNERS

Juan Carlos Llorente	Out-of School Processes of Knowledge Constitution	210
Marianne Andersson Thomas M. Dyekjær Jakob Wandall	Slow Learners	228

DISTANCE EDUCATION

Gunnar Grepperud	From Information Technology to Thrilling Sources of Learning	242

Notes on Contributors 254

To the Reader

The present yearbook: *Adult Education Research in the Nordic Countries 1992/93*, is the third in the series *Social Changes and Adult Education Research*. The primary aim of the yearbooks in this series is to present the most recent and on-going research on adult education to an international audience. This year's book reflects the major trends in research over the last two years.

The primary source for the first two volumes in the series was papers presented at the annual *Nordic Researchers' Conferences in General and Adult Education* which are held at the Nordic Folk Academy, Gøteborg Sweden. However, this yearbook does not share a similar association with this researchers' conference. The majority of the articles here have been written by researchers who did not present papers at the most recent conference which was held in June 1993.

As is evident from the table of contents, the largest group of articles concerns vocational adult training aimed at improving the qualifications of the labour force and the population in general. This reflects problems in the labour market which are common to all the Nordic countries. The articles refer to special measures and programmes introduced in the Nordic countries, but the growing importance of adult education with regard to qualification, know-how and job-related education is an international trend. Therefore some articles also look at the international development in this field and place adult education policies in a broader context.

Another group of articles examines adult education issues, centring on the learning processes and such concepts as participation and self-directedness. Another topic area is the drop-out rate of adult education courses in general education.

Two articles focus on the learning process of illiterates and slow learners. One of these articles uses empirical data from Argentina, while the other examines education programmes in Denmark. An article from Norway looks at distance education.

It is impossible to give the whole picture in such a volume, but the articles present a broad range of the current research on adult education in the Nordic countries. To attain a more comprehensive picture of Nordic

research on Adult Education please have a look at the two previous issues. The first issue has a general overview from each of the Nordic countries.

The editorial staff has consisted of one person from each of the four countries, each being responsible for the articles from their respective countries. The practical editorial work has been carried out by the Norwegian Institute of Adult Education. We hope that the articles will give readers in and outside of the Nordic region a general insight into the principal trends in Nordic research. We also hope that you will find much interesting and valuable reading.

The editorial committee

ADULT EDUCATION POLICIES IN THE NATIONAL AND EUROPEAN CONTEXT

9

Popular Adult Education and Social Mobilization: Reflections in Connection with the Swedish Committee on Power

Kjell Rubenson

Departement of Education and Psychology, Linköping
and University of British Columbia, Vancouver

Introduction

The theme of this article reflects the fundamental changes presently occurring in Europe following the fall of communism in East Central Europe, and the evolving of the European Community in the West. This has brought the changing relationship between state-community-social movement and the individual to the forefront of both the political and the scholarly agenda. Much of the discussion is centered around the idea of civil society. As Seligman (1992) points out, the rediscovery of civil society concept has come to mean different things to those writing within a Western perspective and those living "East of the Elbe". For many of those in East Central Europe it is a call for the institutionalization of the principles of democratic polities of the West on which principles of citizenship are based:

> *In a sense then, what civil society means to writers in contemporary East Central Europe are the formal legal, and institutional venues through which the individual as an autonomous moral agent can act out his or her needs and desires in the social and political sphere.* (op. cit. p. 6).

In the West the discussions on civil society are often closely connected to the emergence of the so-called New Social Movements. There is an emphasis on community and on the re-establishment of public space through the transformation of the state apparatus and, particularly in the U.S.A., to counteract the negative effects of the ideology of individualism (Boggs,

1986; Seligman, 1992). Bell (1989, p. 56) states that there is a demand for a manageable scale of life where more decisions are made locally without controll by the state bureaucracies. Cohen (1985) sees the traditional social movements as large scale organizations with a quasi-political character, assuming tasks of economic and political steering. In accord with Habermas's "communicative theory" the new social movements can illustrate a form of democratic action, based on communicative interaction that would revitalize the public sphere and so, renew public life.

In Sweden the changing synthesis of public and private needs have been discussed by a Parliamentary Committee on Power (SOU 1990:44). There are several reasons why the Swedish example is of general interest in the analysis of popular adult education and social mobilization in Europe. Democracy in Sweden has come further than many other European countries with regard to social and economic conditions and citizen participation in political parties, organizations and social movements.

Also, popular adult education played a crucial role during the development of the so-called Swedish Model as an integral part of these social movements. However, it is not only the success of the Swedish Model and the "system" of popular adult education that warrant a close look at the Swedish experience. It is also the shortcomings of these structures and the uncertainties they pose regarding the future direction of the Swedish welfare state. The Swedish case also provides a useful point of departure in addressing the fundamental issues facing the literature on new social movements and post modernism. The purpose of this preliminary paper is to use the Swedish experiences to point to what I regard as problematic issues in contemporary social theory on civil society and new social movements, such as, the balance between collective and individual responsibility and power, the role of the traditional political arena in efforts to achieve the movement's idea, and the role of work in the struggle for civil society. The discussion starts with a brief look at the Swedish Commission on power.

Swedish Commission on Power

The Swedish concept of democracy departs from the principle of equality. From this it follows that everyone would have the same opportunity to exert influence over one's own life and over society as a whole. It is a matter of each individual having actual influence and not merely a recognition of this influence. The goal of democracy is for citizens to have equal opportunities to participate in shaping the future. Everyday democracy is only possible

when there is an equitable distribution of resources across the population; economic and organizational resources, knowledge and competencies, self-confidence and contacts with influential persons (SOU 1990:44, p. 13).

The content and processes of democracy change as the economic and social situation changes. Features in the development may cause a hollowing out of democracy. The Commission was established to analyze how the creation of a thoroughly organized industrial society with complex networks, segmentation and special interests with the power to block, affects democracy.

The Swedish welfare state, often described under the heading of the Swedish Model, has been characterized by centralized wage negotiations, a high level of mutual understanding by the social partners, full employment, the strong society as expressed in a large public sector, universal benefits extensive use of experts in social engineering, corporatist, centralization and a male dominated perspective. Strong organizations is a cornerstone in the Swedish Model. A strong influence by laypersons, popular movements and organizations is seen as fundamental to democracy. Presently there are strong external forces that are changing the prerequisites for a society like the one that formed the basis for the Swedish Model.

Despite the obvious success of the Swedish Model to create a relatively more equitable world, it is not without problems. The model of a few strong organizations brought about a merger of smaller units, centralization and bureaucratization with the result that members often felt they had little or no influence over the organizations. It is also very evident that while solidarity wage policies and active labour market policies like the general social policies have benefited women in many ways, women are less represented within the corporatist than the political power structures (op. cit.). The Swedish Model stands at a crossroads. New trends toward decentralization, local bargaining, and a breakdown of a heterogeneous labour movement into smaller groups with specific interests, are threatening the capacity to act for the general good. The purpose here is not to analyze the general findings of the Commission but, in the context of the broader debate on civil society and new social movements, look specifically at the issues of a) social movements and political power and b) the role of work.

Social Movements and Political Power

According to Boggs (1986) there are some common characteristics of the new social movements, notably, that they flourish outside the established

political system, that there is an open and participatory style of politics, that they are reluctant to compete for political power in the arena of mass based parties, that they try not to gravitate towards a "mass-based organization" model, and they attempt to avoid duplicating the political division of labor between institutional elites and atomized masses. As Boggs (op. cit. p . 14) so rightly points out:

> *The ongoing conflict between prefigurative (value-oriented) and instrumental (power-oriented) dimensions of popular movements has all too often been resolved in favor of the prefigurative, with typically fatal results... Lost in this outlook is an understanding of the transition from present to future as a complex process and with it any insightful approach to political strategy.*

The interesting point is that the Swedish popular movements chose a strategy diametrically opposed to what characterizes the new social movements by adopting strong centralized organizations struggling to achieve as much political power as possible. In fact the concerns raised by the Commission are whether or not this development has gone so far that it might start to jeopardize democracy. Independent free organizations can, on the one hand, counteract hierarchical dominance. On the other hand they can also be an instrument for maintaining and strengthening existing inequalities and favoring special interests. Issues that are not supported by powerful organizations/interests do not make it to the agenda. Further representative democracy can be threatened by the extent of the delegation of power to organizations/interests.

According to Korpi's theory on power mobilization (Korpi, 1978), it is the balance in power resources between major collectives or classes, in particular, capital and organized labour that regulates the distribution of life opportunities social consciousness, conflicts on the labour market, public institutions and so on. Similarly, changes in power tend to be reflected in changes in social institutions and their *modus operandi.* The theory postulates that a strong labour organization can get the state to act against the interest of capital. Esping-Andersen (1989) sees parliamentary class mobilization as a mean for the realization of the social democratic welfare state. The liberal welfare state, with its means-tested assistance and modest universal transfers, cater mainly to a clientele of low income dependents. Entitlements are strict and often associated with stigma. The social democratic welfare state, according to Esping-Andersen, rather than tolerating a dualism between state and market, between working class and middle class promote an equality of the highest standard rather than an

equality of minimal needs. The Swedish Model can therefore be seen as a result of having two strong classes, labour and capital, and not, as commonly is the case, only one, capital. Further the common good was promoted by the fact that the labour movement not only acted in its capacity of an interest group but also from its historical roots as a social movement promoting civil society. Contrary to the position of new social movements, it was in the traditional political arena and by integration of corporatism and political power that the labour movement achieved its goal.

It is of interest to look a bit closer at the Commission's study of organizational capital in Sweden, as the picture is more complex and problematic than what is reflected in the previous discussion. There is a connection between social position and political participation. The relationship between, economic and social resources, versus political participation, is one of the most well documented findings in political sociology (Petersson, Westholm & Blomberg, 1989, p. 211). It has been explained that collective resources can strengthen but also weaken the importance of individual resources. In countries with a political and social culture that is individualistic, and where the lower social economic groups lack strong organizations, the collective will works towards strengthening the already strong.

It has been commonly recognized in the literature that in contrast to the situation in many other countries, lower socioeconomic groups in Sweden are as well organized as those in the higher groups. One would therefore expect the reverse to be true in Sweden, i.e. that collective group processes will strengthen those with weak individual resources. The Commissions study shows that this is only partly true. The distribution of organizational capital varies between one form of organization to another. While blue-collar workers are members in unions to the same extent (80 per cent) as salaried workers or employers (employers organizations), they are less often members of cultural organizations (10 versus 23 percent) or outdoor organizations (5 versus 16 percent). The lower socioeconomic groups are also somewhat less represented in parent organizations and housing co-operatives. There are also more from the higher groups that are members in several organizations. Thus the commonly held view of Sweden, as a country where strong popular movements have managed to erode the difference in organizational capital between different classes, is only partly true. It is true for one highly important form of organizations, namely, unions, but not for the general trend (op. cit). The Commission's analysis further showed that organizational capital does not compensate for lack of individual resources. However, as is pointed out in the study, the

correlations between individual and collective resources are likely substantially lower than in most other countries (op.cit, p. 230).

As discussed above, the new social movements advocate small non-bureaucratic organizations with a high degree of participation by the members. In this respect and in view of the importance of the Swedish unions the following results from the Commissions study is of interest (see Table 1).

Table 1. Influence through unions
(After Petterson, Westholm & Blomberg, 1989, p. 125)

Possibility to influence the union	The unions possibility to influence work situation	Percent of employees
Large	Large	29
Large	Small	8
Small	Large	26
Small	Small	37
Total		100

Table 1 shows that more employees believe that the union can influence the work situation that saw themselves having influence over the union. This reflects the problem between representative and participatory democracy in the traditional Swedish popular movements. A strong labour movement operating within a corporatist structure, while highly successful in building a social democratic welfare state, has problems activating its members. It is of interest here that the Commission found a very strong correlation between taking initiative at the workplace and interest in politics and membership in organizations. I therefore find it problematic when representatives for the new social movements so strongly argue that they are not primarily grounded in labour struggles (Boggs, 1986, p. 3). On the contrary, any analysis of the role of popular adult education in the mobilization of Europe will have to address how work regulates life

opportunities and the preparedness to engage in lifelong learning, which is a crucial activity in the emergent information economy.

The Importance of Work

Traditionally, with the obvious exception of labour education, issues around work have not been a prevalent issue in Swedish popular adult education (Arvidson, 1985; Ginner, 1988). However, I would argue that any analysis of the role of popular adult education in the mobilization of Europe must have work as one of its cornerstones. Drucker (1993) states in his book *Post-Capitalist Society* that we are in a period of transition towards a knowledge-based society which will be composed of two major classes - knowledge and service workers. Books like this reflect a new politico-economic imperative for adult education policy. The discussions are framed within an imperative that places importance on highly developed human capital, science and technology to support a country's need for economic restructuring and greater international competitiveness. The business section in the daily papers frequently carries articles on adult education. Ministers of finance have started to sound like Ministers of education, while books like *The Work of Nations* by Robert Reich have become the new bibles of educational policy makers. Both from a theoretical and strategic perspective the search for practical strategies for popular adult education it seems important to look closer at this new imperative.

The following Canadian example illustrates the present thinking. *The Speech from the Throne, May 13 1991* proclaims that "In the dawning knowledge age, how well we live will depend on how well we learn. Canadian men and women must have access to both the skills and lifelong learning opportunities necessary to improve their job prospects and ensure their own prosperity." It is in this context that lifelong learning has become the *élan vital* of economic life.

In order to understand the new imperative that is presently informing policies on popular adult education, I will first look at the original position on lifelong learning, here called first generation of lifelong learning, and then return to the discussion on work and civil society.

First generation of lifelong learning

Following the Faure report, UNESCO's Institute for Education concentrated its policy and research effort on the conceptualization of lifelong education. The appeal of lifelong learning when first presented was its potential to respond to the new challenges caused by rapid and unprecedented change by continuing the process of renewal of knowledge, skills and values throughout life. These changes were discussed not specifically within an economic imperative but in all spheres of political, cultural, social and economic life. "In fact, the far-reaching socio-economic developments accompanied by a special emphasis on the principle of democratization have contributed a great deal to the present phenomenon of change" (Dave, 1976, p. 16). From within a humanistic tradition, the proponents of lifelong learning called for a better society and a new quality of life where people adapt and control change in a way that allows the full development of their individual personalities; "making themselves" rather than "being made" were the catchwords. Through self-evaluation, self-awareness and self-directed learning, humans were expected to work towards achieving the central goals of democracy, humanism and the total development of self.

The conceptual work within UNESCO stressed that the evolution of lifelong learning could not be seen as a purely educational venture but as a societal one. It would involve the horizontal integration of education and life, not simply as a result of finding educative experiences in everyday life but ensuring that the experiences consist continuously of "educational situations." A precondition for lifelong learning was a changed conceptualization of education, encompassing formal, non-formal and informal settings for learning. One warned against narrowly conceptualizing lifelong learning as being merely an extension of the idea of retraining without taking into account the humanizing qualities of individual and collective life. A crucial weakness in the structure of society is an absence of political will, not only towards the democratization of education but also towards the democratization of society. Consequently, the existing social relations of production provide a major obstacle to the true realization of lifelong learning - indeed lifelong learning will become a new arena for social struggle because it will require a classless society (Vinokur, 1976, p. 362). Finally, time after time it has been stressed that in order for lifelong learning to become a reality it will be necessary for people to want to learn.

A comparison of the first and second generation of lifelong learning suggests that the concept has lost its utopian origin and has been reduced to a narrow definition centered on meeting the needs of the economy by equipping the workforce with the necessary skills and competencies. Another major

difference is that while the earlier debate gave a lot of attention to obstacles and preconditions for lifelong learning, today's discussion is mainly concentrated on the need for lifelong learning, paying very little notice to prerequisites for and hindrances to fostering a lifelong learning culture. The research on participation in adult education and training and the "role" of education in selection, stratification and reproduction is ignored. Rather than declaring "The New Jerusalem," it seems important to look at the present situation in light of the initial discussion on obstacles to lifelong learning.

Work as an obstacle to lifelong learning

Collins (1988, p. 110) proposes that the various forms of social organization can be explained as part of a theory of stratification. According to this perspective, differences among individuals and groups are generally forms of conflicting interests. Of particular interest here is the link between the educational credential stratification on the one hand, versus the way in which the work role encourages or discourages lifelong learning.

The allocation of work roles influences lifelong learning in at least three ways. First, certain roles provide more opportunities to take part in adult education than others. Data on who participates in some form of employer-sponsored education show that regardless of country there are major differences in access to education and training for various groups of the labour force. The participation pattern is linked to the work hierarchy, and the more qualified the position the more common it is that an employer will sponsor some form of education and/or training. Not only does the participation rate differ greatly by level of occupation but so does the nature of the education and training. Künzle and Büchel (1989) found that in Switzerland 70 per cent of general managers who had participated had taken a course outside their organization, compared to 26 per cent of unskilled workers. The latter had mainly followed some shorter form of on-the-job training.

Second, those in higher positions have by far the best chances to learn on the job. The differences existing among various groups entering the labour market become more and more pronounced throughout the life span. Those who are favored find themselves in a work situation which is constantly generating a need for knowledge, while the complete opposite applies to those who suffer de-qualification.

Third, allocation of roles has an indirect impact which has to do with how the "objective world" influences the perception of reality. Thus, mental structures are inevitably formed differently in different societal and historical settings (Mannheim, 1936, p. 238). This is reflected, for example, in the established relationship between job design and the individual's life outside of work. Meissner (1971) was able to demonstrate a direct connection between the shaping of work tasks and the life of the individual outside working hours. When the scope for individual initiative at work was limited by factors in the work process, the ability of workers to participate in leisure activities appeared to diminish. A similar tendency emerges regarding the effect of work as a limit to opportunities for social contact. When workers are allowed more control over their work, they show more interest in participating in decision-making processes. Accompanying changes also increase their participation in leisure activities. Meissner's findings support Leontjev's thesis on the link between praxis of work and our structures for thinking (Leontjev, 1983). Thus, Larsson et. al. (1986) found that non-skilled workers with little formal education in occupations that offered limited possibilities for growth were characterized by a very restrictive conception of adult education. According to this restricted view, it is only when participation in adult education results in better and higher paying work that it is meaningful.

It is interesting to note that there is a close resemblance between the discussion about humanizing the workplace through the reorganization of work, and the principles for effective learning and instruction based on cognitive sciences. The "action regulation theory", developed primarily by Hacker and Volpert, focuses, among other things, on the impact of working conditions on peoples' socially constructed cognition and learning processes (Hacker, 1985; Volpert, 1989). A central assumption in the theory is that by striving for autonomy in action a person tries to satisfy a basic control-need. The action regulation theory attempts to provide an explanation of how such a motivated and autonomous-oriented individual actor sets goals and reaches them. These processes are considered a psychological aspect of action referred to as "regulation". The transformation of a general goal into a sequence of operations occurs through the hierarchical-sequential organization of action. There are various levels of action units differentiated by levels of regulation that determine the scope of action. Thus the level of autonomy, i.e., the degree of freedom in the setting and reaching of goals, plays a crucial role. As long as the basic patterns are flexible, there is a broad scope for autonomous action which is an essential characteristic of personality development. According to this perspective, regulation chances (the scope to act) are very important determinants of the socialization process. They influence the way people think about themselves, their

aspirations and willingness to act, thus having far reaching consequences for individual competencies. The implications for the qualifications of the workforce and the ways to acquire and use them are apparent. In a hierarchical, inflexible work organization, restricted ability to act will result. When the individual is cut off from central processes of decisions and planning, he or she is incapable of learning more elaborate actions, which has negative effects on his or her motivation and competencies. The negative impact of what Hacker and Volpert call restrictive regulation requirements, (or lack of control of working conditions) on peoples' feeling, thinking and acting, is well documented in the research literature (Lennerlöf, 1986). There is also strong evidence that increased control has positive effects on peoples' well-being and motivation.

An illustration of the link between structure of work, perception of reality and adult education can be found in a Swedish study on local struggle for industrial democracy. Figure 1 represents the situation before the organization of work was radically changed and reflects the link between structure and agency.

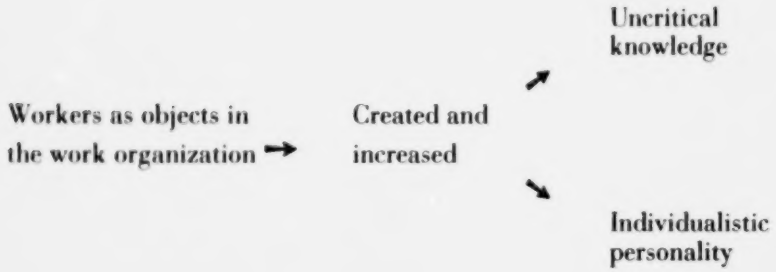


Figure 1: Relationship Between Work Organization, Knowledge, and Personality Before Democratization (source: Svensson, 1985, p. 99).

In the process of changing the workplace, employees, who were the subjects of the research, came together in study circles to explore ways in which they could strengthen their influence over the organization of work. During this process, the workers created what Svensson calls their own critical knowledge, and their meetings acted to strengthen solidarity among the union members (all workers were unionized). As the workers' solidarity and critical awareness increased, they gradually managed to achieve a more fully realized industrial democracy. This in turn resulted in a further

strengthening of solidarity and increased critical insight into the conditions of labour. According to some of the workers interviewed in Svensson's study, the most important element in this spiraling process of solidarity and insight was the learning that occurred in the study circles. The workers' point of departure was their own experience, which they related to course material on industrial democracy, and which in turn led them to visualize alternatives to the system in which they were working. These alternatives, the practical result of the interplay of study circle material and everyday experience, were then presented to the employer under the auspices of the local union.

The structural changes that occurred in their workplace also affected the workers' sense of agency; their values, expectations and demands were higher, and their class awareness and sense of solidarity with the working class was greater. The changes that occurred are a good example of the dualism between human agency and structure that Giddens draws attention to (Giddens, 1984).

It is important to note that, despite the general cry for a better qualified workforce and worries about skill shortages, new technologies do not themselves result in demands for higher qualifications or better possibilities for employees to develop and broaden their skills. On the contrary, the research literature is full of contradictory findings with claims of de-skilling, up-skilling, polarization and re-skilling (not more but different qualifications needed). There are good reasons to be skeptical of the more optimistic as well as the more pessimistic positions. Both are expressions of technological determinism which holds that technology will more or less automatically result in positive or negative effects on skill demands and opportunities for the development of competencies (Ellström, 1992). A more plausible position, and one that has support in recent research (Löwestedt, 1989; Zuboff, 1988), is that the consequences of new technology on the demand for and development of competencies depend on the interplay of the nature of technology, implementation strategies, work organization and the competencies of the workforce. It is the strategy of how technology is used, not the technology, itself that determines what kind of skills are needed and hence gov rns the employees 'opportunities for developing their competencies. Thus the question of skills cannot be discussed solely from a narrow economic perspective on efficiency but must be understood in terms of labour's struggle for humanization of work and workplace democracy. Studies like *Made in America* (Dertouzos, et al., 1989) show that while some industries have adopted the new modes of production there is very little diffusion of their practices to the majority of firms.

In short, the literature on structural changes in the labour market or studies of links between new production technologies and skill requirements suggest very unequal opportunities for lifelong learning.

The issue of how preparedness to engage in lifelong learning and the opportunities for education and training are socially constructed is of course as relevant from a utopian view as it is from the new politico-economic imperative. However, the latter seems to assume that the market forces, in some mysterious way, have created a general demand for lifelong learning. It is in the context of this struggle that we have to look at the role of popular adult education in creating civil society and promoting a more equal distribution of lifelong opportunity.

In summary, this brief and very preliminary paper should be seen as a warning not to "throw out the baby with the bath water". In today's passion for community volunteerism and new social movements (with their criticism of bureaucratic centralism and political power) the rise and, maybe, fall of the Swedish Model ought to be thought-provoking. Further, any struggle for, or analysis of, civil society will have to include the place of work.

References

Arvidson, L. (1985). *Folkbildning i rörelse.* Stockholm; Liber.

Bell, D. (1989). American Exceptionalism Revisited: The Role of Civil Society. *The Public Interest*, 95, 38-56.

Boggs, C. (1986). *Social Movements and Political Power.* Philadelphia: Temple University Press.

Cohen, J. (1985). Strategy and identity: New Theoretical Paradigms and Contemporary Social Movements. *Social Research* , 52:4. 663-716.

Dave, R.H. (Ed.) (1976). *Foundations of Lifelong Education.* Oxford: Pergamon Press.

Dertouzos, M., Lester, R. and Solow, R. (1989). *Made in America: Regaining the Competitive Edge.* Cambridge: MIT Press.

Drucker, P.F. *Post-Capitalist Society.* New York: Harper Collins Publisher.

Ellström, P-E. (1992). *Kvalifikation, utbildning och lärande i arbetslivett.* Linköping: University of Linköping.

Esping-Andersen, G. (1989). The three political economies of the welfare state. *The Canadian Review of Sociology and Anthropology*, 26, 10-36.

Giddens, A. (1984). *The Constitution of Society.* Berkely: University of California Press.

Ginner, T. (1988). *Den bildade arbetaren.* Linköping: TEMA.

Hacker, W. (1985). Activity: A Fruitful Concept in Industrial Psychology. In Frese, M. and Sabini, J. (Eds.). *Goal-directed Behaviour.* Hillsdale, N.J.: Erlbaum.

Korpi, W. (1978). *Arbetarklassen i välfärdskapitalismen.* Stockholm: Prisma.

Künzle, D. & Büchel, D. (1989). *Weiterbildung als Strategie für Region und Betrieb.* Zürich: Verlag der Fachvereine.

Larsson, S. et al. (1986). *Arbetsupplevelse och utbildningssyn hos icke facklärda.* Göteborg, Sweden: Göteborg Studies in Educational Sciences.

Lennerlöf, L. (1986). *Kompetens eller hjälplöshet? Om lärande i arbete. En forskningsöverskrift.* Stockholm: Arbetarskyddsstyrelsen. Rapport: 32.

Leontjev, A. (1983). *Virksomhed, bevidsthed, personlighed.* Köpenhamn: Progres.

Löwstedt, J. (Ed.) (1989).*Organisation och teknikförändring.* Lund: Studentlitteratur.

Mannheim, K. (1936). *Ideology and utopia: An introduction to the sociology of knowledge.* London: Routledge & Kegan Paul.

Meissner, M. (1971). The Long Arm of the Job: A Study of Work and Leisure. *Industrial Relations,* 10, 239-260.

Petersson, O., Westholm, A. & Blomberg, G. (1989). *Medborgarnas makt.* Stockholm: Carlssons.

Reich, R.B. (1990). *The Work of Nations.* New York: Random House.

Seligman, A.B. (1992). Trust and the meaning of civil Society. *International Journal of Politics, Culture and Society* , 6:1, 5-21.

SOU 1990:44.

Statistics Canada. (1986). *Adult Training Survey.* Ottawa: Education, Culture and Tourism Division.

Svensson, L. (1985). *Arbetarkollektivet och facket.* Lund, Sweden: Lund University.

Volpert, W. (1989). Work and Personality Development from the Viewpoint of the Action Regulation Theory. In Leymann, H. and Kornbluh, H. (Eds.). *Socialization and Learning at Work.* Aldershot: Avebury.

Zuboff, S. (1988). *In the Age of the Smart Machine. The Future of Work and Power.* New York: Basic Books.

Direction of Finnish Adult Education Policies within the Context of European Integration

Eero Pantzar

University of Tampere, Finland

Abstract

During the period of more than twenty years the societal context of adult education and educational policies has undergone some radical changes: democrafic, economic and social. The changing context of adult education (policy) provides the prerequisites and conditions in accordance with which adult education is implemented.

Typical European elements in the content of Finnish adult eduaction policy are those concerning educational equality, how to deal with the issues of unemployment, distance education and open learning.

The closeness of Finnish adult education policy to European policy will surely ease our integration with the European Union. This is also supported by the european roots of the Finnish educational tradition.

Introduction

The roots of European adult education stem from the previous century. In the 19th century, Europe was very much different from what it is today. Economic and social developments have made themselves felt everywhere. Education has become an integral part of affluent societies, emphasising the role of educational policies in the field of social policy. Europe's political boundaries and social systems have undergone innumerable changes over the past one hundred years. Although the idea of a united Europe is not a new one, the ongoing debate on European adult education policy is a recent development. Firstly, talk of transnational educational policies (mainly as general educational goals) is post-W.W.II development. Secondly, the

history of present-day national adult education policy in most European countries, e.g. in Finland, has its beginnings in the 1960s. Thirdly, European integration now in the 1990s appears to be undergoing a powerful process of realization. Without a doubt, one can say that the past few years have been the heyday of European educational ideology. It is likely that the expanded European Union of the coming years will constitute a real basis for endeavours to integrate the adult education sector along within the educational policies. What the outcome of all this will be, only time will show.

When examining European adult education policies, and the policies of individual countries, one should bear in mind that education firmly tied up with national culture constitutes a central part of national identity. It has been said that education is a typical national enterprise because of its role as a mediator of values and traditions. In this respect, the countries of Europe certainly manifest some differences (Kallen 1991, 147). Indeed, it may take a long time before national adult education policies are laid down with the goal setting of European adult education policy. It has also been claimed that national suspicion of EC/EU directives and the ministerial council's decision has increased (Raivola 1993, 7). The principle of subsidiarity ensuring decision making to the national level in matters pertaining to educational policy dates back to the agreement made in Rome. What then, in the area of adult education, for example, would be left to European educational policy to determine? It is probable that uniformity will come to apply, first and foremost, to the sector of vocational education. The impacts of the shift over to a common market on national adult education policy will be three-fold. Firstly, there will be the influences of the necessities of directing national educational policies in the Pan-European direction. These necessities will apply most probably to matters such as social aspects of study, the legitimation of degrees and diplomas and other academic achievements. On the other hand, loose guidelines for national educational policies may be developed at the European educational policy level. Similarly, the European level may facilitate development work benefiting the reformation of educational systems of individual countries (Cedych 1991).

As I proceed to examine the adult education policy on a national level (with emphasis on the case of Finland) and the transnational European level (with emphasis on the EU's adult education policy), it should be borne in mind that the impacts of educational policy on everyday adult education are more clearly manifested in countries in which the public sector plays a major role as an implementor of adult education. In any case, governments throughout Europe have shown increasing attention towards adult education as a result

of the rapid growth in the supply of adult vocational education (Jarvis 1992, 409-410). Is it then probable that adult education in the EU member countries would, in part, become alike as a result of EU educational policy guidelines regardless of the Government's role as a provider of adult education services in a specific member country? My belief is that adult education provided by the private sector will hardly change at all as a result of EU policies. The changes inevitably ahead of us will be more the result of endeavours to keep up with international developments.

In this article, I shall first take a look at the change in the societal context of adult education within the EU and in Finland. I shall be assessing European adult education both in terms of EU policy and at the national level. In regard to the central areas of emphasis in educational policy, I shall be giving particular attention to the provision of adult education, the forms it takes, its contents, target groups, and to adult education as a science. In my analysis of Finnish adult education policy, the emphasis will be on development and changes influencing the aforementioned contents of educational policy. In the conclusion of my article, I shall present a comparison between Finnish and European adult education policies in the form of a summary.

The changing societal context of adult education

In the last twenty or so years the national and European adult education policy has had to undergo some radical changes in the respect of its societal setting, i.e.: its demographic, economic and social settings. The changes that have occurred in Finnish society are largely those applying to the general trend in Europe (EU countries) with some differences. These similarities and differences possess a great deal of relevance when comparing adult education policies in Finland to those within the EU. In the demographic sector, aging of the population is a common problem. As to the ethnic structure of the population, Finland has not undergone any significant changes during the past few decades whereas in the case of the most significant EU countries the said changes have been pronounced. The role of economic change in the context of adult education and adult education policy manifests itself, first and foremost, as an understanding that education and training are vital components of the constantly intensifying economic competition. This has had the added effect of enhancing the deciding role of manpower policy in adult education in Finland and especially in the more developed EU countries (Adult Education 1992; also Lowe 1993).

Social change, especially the link between a rise in social problems and adult education, is not seen as being an essential environment of public adult education policy - be it of Finnish or EU origin - in the same way as demographic and economic changes are. Indeed, the issue at stake is that the direction of present-day educational policy primarily involves vocational training, whose strongest links are with the labour market and the commercial life. However, Europe's growing crime statistics, use and peddling of drugs, environmental problems, problems faced by indi-viduals, and the like are elements of the reality in which adult education is offered and in which the adult student partakes of them (Pantzar 1993). In this respect, the social setting of Finnish adult education appears significantly more restive than is the case on average in the rest of Europe.

The changing social context of adult education provides the prerequi-sites and conditions in accordance with which adult education is imple-mented. For adult education policy - both in Finland and within the EU - this context acts not only as a delimiting factor and determinant, it may also be a subject that can be influenced by education. Let´s take the growing social problems mentioned in the above as an example.

It is very probable that no one intends to provide direct solutions to social problems through adult education policy. More probable is that measures in accordance with educational policy are hoped to provide part of the basis for steering social developments in the right direction.

European adult education policies

Here I shall take a look at European adult education policies with certain constraints. While I shall not include the subject of adult education policies in the former socialist countries of Eastern Europe, I certainly do not consider them to be outsiders. Secondly, European educational policy is not simply a matter of transnational community policy - it is also a pageant of national policies.

European adult education policy - either limited to the countries of Europe or within a more global educational policy framework - may be seen as having been implemented for several decades (Görs 1990, 2). UNESCO, with its series of world congresses of adult education going back over 40 years, was the first to formulate adult education policies on a global scale. The role of UNESCO is a significant one, although its general resolutions - because of the nature of the organisation - do have a global tinge to them. They have lacked concrete proposals of measures to be taken. Moreover, the

direction of UNESCO´s adult edu-cation policy is closely linked to the organisation´s broader cultural or social policy.

OECD has had a marked impact on European education - especially on adult vocational education - during the past few decades. Its educational policy has provided support for the more general educational ideology binding adult education in position of subservience to economic and labour policies.

The Council of Europe has had a great influence on broad-scoping European adult education. In the early years of its existence, the Council did, however, concentrate more on recommendations pertaining to general education.(Jüttner 1993). By the 1970s, the Council´s model of permanent education began to form the basis for the debate addressing the future prospects of adult education.

Today´s European (adult education) policy is understood, almost without exception, to refer to the European Union's (formerly EC´s) educational policy. None of the hitherto published memorandums of the European Community´s commission on educational policy fulfills the requirements of a broad-based adult education policy document. The Memorandum on Vocational training in the European Community in the 1990s (Commission 1991b) and the Memorandum on Higher Education in the European Community (Commission 1991a) touch upon adult vocational education in particular. The Memorandum on Open Distance Learning (Commission 1991c) takes a wider view on adult education (Pantzar 1994). In addition, the memorandum is an interesting one because of its strong attachment to future development policies. These memorandums give grounds for claiming that EU - like OECD - places emphasis on the relevance of vocational training in (adult) education policy goal setting. In this way EUs adult education policy is placed firmly under the steering influence of manpower policy and the sense of economical well-being. Indeed, some have gone as far to claim that the aforementioned memorandums are representative of a training ideology biased in favour of commercial interests and based on the principle of continued growth (Kivinen & Rinne 1993, 26). When assessing matters, one should, however, remember that the said memorandums are not intended to be treated as strict directives on educational policy but to provide a basis for political debate in the member countries (Raivola 1993, 6).

Despite the common conception of EC memorandums as being semi-official statements on European adult education policy, one should note that educational policies have been formulated on other forums as well - by

working groups of experts, international educational organisations, etc. As a case in point, I wish to mention a group of experts (composed mainly of researchers and university lecturers) representing twelve countries, which, funded by the EC in 1991-1992, produced an interesting paper addressing European adult education's requirements and pers-pectives. The paper also included adult education policy recommendations (Adult Education 1992).

Trends within European adult education policy

In the following, I shall make a review of the contents of European adult education policies placing particular emphasis on those which come up more frequently in the national policies of various countries and on those policies stated at the Community level which can be seen to clearly influence national policies. When seen these points of view, the adult education policy programme presented by the aforementioned working group is an interesting one.

The majority of European countries are requesting a coherent and comprehensive national adult education policy under the aegis of a single government department (Adult Education 1992). The sovereign national nature of educational policies does not appear to have become more settled with the development of the single market (cf. Piehl 1993, 33; Kallen 1991, 148). This being the case, European adult education policy is being used to seek common grounds as well as opportunities for increasing cooperation at the level of practical training (cf. Müller-Solger 1990, 822).

On comparing national and pan-European adult education policies with the educational provision and the contents of education, one soon observes differences and similarities. The requirement of an educational provision promoting educational equality is to be found in nearly any document on educational policy. Similar attention is drawn to levelling out of regional differences in and through adult education. In the area of adult education contents, particular emphasis is placed on two matters: key qualification and the relationship between vocational and general adult education. The putting of vocational and general adult education in competetion with each other, recognizable in many national adult education policies, is gradually being seen as artificial (Dohmen 1988). The key quali-fication debate (e.g. Meisel 1989) has also included a point of view concerning the above relationship. The skills essential to every member of society, understood to form what is termed key qualification, are understood to be of vital importance in the various spheres of life (occupation, free time, family life, citizenship) (e.g. Morgan 1986). The problem associated with the principle

of offering key qualifications to all is no longer one of educational policy - rather it is one involving the contents of education. The debate on this subject failed to provide a unanimously accepted definition of what these qualifications might be. When speaking of European adult education policy, one should also pose the question of whether key qualifications can be both European as well as national.

The adult education policy debate concerning the foremost target groups is based on observing the changing reality and then assessing edu-cational needs. The backgrounds of European adult students appear to be more or less heterogeneous. Ageing, increasing differences in basic education, increased unemployment, and ethnic differentiation have been registered. The area of emphasis in educational policy measures appears to be on the development of educational provisions for ethnic minorities and immigrants. Counteracting the social maladies of unemployment through adult education policies has also received a lot of attention. The job-creating function of education has been widened so as to take into consideration the value of studying for studies sake (Pantzar 1993, 17). Defining of target groups for education as such is not, however, suffi-cient; e.g. to ensure that the goal of educational equality is achieved. Consequently, the development of the organisation of teaching has received a lot of attention - in educational policies, too. In practice, a great deal of trust appears to be placed in the potential of open learning and the promotion of distance learning (Commission 1991c; Raivola 1994).

The expanding of adult education and the increasingly higher demands imposed on teachers have together placed pressures on the development of training of adult educators. Within both national and European adult education policy it is accepted that the tasks allocated to practical adult education - these in turn serving national and European development - can be better implemented when one of the cornerstones is made up of competent educators and instructors. In different parts of Europe - even within EU - the situation is quite different. From the point of view of integration endeavours in the field of adult education, heterogeneous adult educator training and variation in competence levels are real impediments. The role of universities will become increasingly important in this area. Research in the field of adult education has received attention in many national adult education policies. First and foremost, the European policy is through cooperation to produce research whose results can be readily and efficiently applied in different countries. Intensifying of documentation and information activities also serves European interests (Pantzar 1993, 18-19).

Developments in Finnish adult education policy

It is claimed that adult education policy has been practised in Finland since the early 1970s. In its early stages it was applied very much in the context of general educational policy. It should be noted that already in the 1970s, the content of the debate dealing with adult education policy repeatedly brought forward concepts promoted by the OECD, the Council of Europe and UNESCO. Lifelong education is a prime example of an idea that found its way into the Finnish adult education policy debate in this way (Pantzar 1991). The principle of *permanent education* later adopted as a slogan in Finnish educational policy encompassed education focusing on children, youth and adults. Consequently, the adult education policy implemented in Finland since the 1980s has been based on the principle of permanent education, often within the framework of a comprehensive educational policy.

To date, adult education policy in Finland may be seen in the light of three stages. The first may be called *the era of promoting of educational equality* and it lasted for most of the 1970s. On entering the 1980s, the multifaceted and equality-oriented content of adult education policy changed and began to place emphasis on adult vocational education. This stage may be referred to as *the era of worklife orientation.* The third stage, which began in the latter half of the 1980s, is characterised by further association with the market forces. This *era of market force orientation* is typified by talk of promoting competitiveness and labour market steering. The said trend manifests itself in most European countries. Nevertheless, the political tendency in Finland during the past few years has been one in favour of discarding the welfare state - and this with the blessing of adult education policy.

The Parliamentary Adult Education Committee of the early 1970s laid down the basis for an adult education policy founded on educational equality (KM 1975). Equality and versatility were issues that applied not only to individuals; they were also manifested in the committee's proposals concerning adult education provision and content. Subsequent adult education policy programmes have not place equivalent emphasis on the significance and need for promotion of both vocational and non-vocational adult education. The official goals of adult education were defined as follows:

- increased educational equality
- promotion of production - development of professional skills
- promoting of democracy - development of political preparedness

- promotion of cultural awareness - development of personality

The era of worklife orientation began with the Government's decision of the planning and development principles in the application of adult education (Vnp 1978). Although the set of goals relevant to adult education policy has not changed very much, the development of adult vocational education had gained in importance. Another line of educational policy pursued in the 1980s was that of permanent education (KM 1985). Already in the 1980s active, occasionally even heated, debate was engaged in on the subject of the relevance to the individual and society of liberal (political and cultural) adult education. Many were of the opinion that adult education policy saw adults simply in the role of employers with the associated educational needs.

As of the late 1980s, the Adult Education Council, the Ministry of Education's advisory body of experts, has held a significant position in the definition of Finnish adult education policy. The Council's work falls within the still ongoing era of market force orientation. The dominating adult education policy ideology is not, however, the result of policy- making as such. Social policy as a whole in Finland has experienced a change of course. As a result, education is increasingly understood to be more of a market product than a service provided by society. Secondly, Finland's economic state was dramatically reduced in the early 1990s. This had a two-fold impact on the content of educational policy in the country. On the one hand, we were required to make cuts in educational expenditure and at the same make statements on that which was felt to be important and that which was not. Adult education was also used as a repellent against the recession. Tidying up of the unemployment statistics by means of mass training programmes can be seen as some kind of a trick. Naive has been the belief of some people in the massive increase in adult vocational training being able to create new jobs.

Nevertheless, the emphasis in adult education policy has continued to be in the development of adult education and in educational planning based on the principle of lifelong education. This current era in adult education policy has also witnessed marked development of tertiary adult education. A central means to achieving the goals of many educational policies lies in the development of open distance learning (Valtioneuvosto 1990; cf. Commission 1991c).

When summarising Finnish adult education policies over a period of more than twenty years, one becomes clearly convinced that the endeavour towards equality as one of the principle applying to the provision of adult education has lost much of its past significance; regional equality seems to

have survived. There has also been a clear shift from the demand for versatility to that of providing for the development of occupational competence. As I see it, the dynamic aspect of adult education policy is represented by the idea of developing efficient means of offering educational services. This aspect has always been present and it is the force that has led us to the determined development of distance teaching and open learning.

The basic policies concerning adult educators' basic and further education and the development of relevant research were defined in a very modern way already in the 1970s. (KM 1975). Subsequent adult education policies have not been able offer anything new in this area.

Finnish adult education and adult education policy in a unifying Europe

On writing this article, my belief is that Finland will be a member of the European Union in 1995. Consequently, my assumption is that Finnish adult education and adult education policy will become more Europe-oriented than if we were to remain outside the EU. As I have noted earlier, the principle of subsidiarity ?? prevails in the sector of educational policy. This, of course, ensures a certain national characteristic (even for EU member states) for this sector of social policy. What then does all this portent for Finnish adult education and adult education policy? On the whole, no major upheavals are expected. Although there are differences between Finnish adult education policy and the ways in which adult education are implemented in Finland and the situation in the other European countries, and the policy formulated within the EU, the similarities weigh more. Most of the differences appear to be due more to differences in the social environment than to conscious, peculiarities in educational policy. The fact that EU current and future member states mainly represent wealthy industrialised countries seems to be a fairly powerful decisive factor in the outlining of educational policies.

Typical European elements in the content of Finnish adult education policy are those concerning educational equality, how to deal with the issues of unemployment, distance teaching and open learning, and the training of adult educators. Some of these are direct interpretations of the educational needs caused by changes in society. On the other hand, the concept of educational equality, for instance, has been interpreted in a number of ways because of different critical ideologies. In Finnish adult education policy, the interpretation of equality during the past few years seems to have become more narrow in scope than the European one. While we in Finland have

confined ourselves to regional equality, many European countries, and even the EU's educational policy, give intimations of a wider interpretation. This become realised in the form of the need to attend to the adult education related rights of different groups in society. In other ways, too, the target group way of thinking is clearly more evident elsewhere in Europe.

The debate (outside official adult education policy) in Finland and elsewhere in Europe on the status of liberal adult education has been very marked during the past few years. The national educational tradition in Finland, a considerable one in terms of the European situation, would appear to be such that even adult education policy cannot override adults' opportunities to participate in adult general education. Therefore, I also believe that the content of key qualifications will become more widely understood.

The state of training of adult educators and adult education research was noted to be of great importance for the development of adult education. In this respect, Finland is among the leading countries in Europe (E.g. Rubenson 1989, 7-9). Here, the Finnish system has progressed far ahead of many others.

The closeness of Finnish adult education policy to those elsewhere in Europe will surely ease our integration with the rest of Europe. This is also supported by the European tradition of Finnish education.

Sources

Adult education (1992). Adult education in the 1990's. A Synthesis of the adult education situation in Europe. Wouters.m (ed.) (Working document).

Cedych, L. (1991). *Higher Education and Europe after 1992.* European Education 2, 77-95.

Commisssion (1991a). *Memorandum on Higher Education in the European Community.* Brussels. Commission of the European Communities.

Commission (1991b). *Memorandum on Vocational Training in the European Community.* Brussels, Commission of the European Communities.

Commission (1991c). *Memorandum on Open Distance Learning in the European Community.* Brussels. Commission of the European Communities.

Dohmen, G. (1988). Der Bericht der baden-württembergischen Weiterbildungs-kommission - Zum Verhältnis von allgemeiner und beruflicher Weiterbildung. In: *Zukunft der Weiterbildung. Schriftenreihe*, Band 262. Bundeszentrale für politische Bildung. 59-72.

Görs, D. (1990). *Zielkonflikte künftiger Erwachsenenbildung in der Europäischen Gemeinschaft.* Erwachsenenbuldung in Österreich 3, 2-8.

Jarvis, P. (Ed.) (1992). *Perspectives on Adult Education and Training in Europe.* NIACE: Worchester.

Jüttner, E. (1993). Europa - Binnenmarkt der Bildung? *Bildung und Erziehung* 2, 133-149.

Kallen, D. (1991). Bildung und Erziehung in der Europäischen Gemeinschaft in den neunziger Jahren. *Bildung und Erziehung* 2, 133 - 149.

Kivinen, O. & Rinne, R. (1993). *Koulutus- ja työmarkkinoiden toiminta - haaste EY:n koulutuspolitiikalle (The functioning of the labour and education markets: a challence to EC's educational policy).* Aikuiskasvatus 1, 21-29.

KM (1975). *Aikuiskoulutuskomitean II osamietintö. [Adult Education Committee, II Partial Report].* Helsinki.

KM (1985). *Jatkuvan koulutuksen toimikunnan mietintö. [Permanent Education Commission, Report].* Helsinki.

Lowe, J. (1993). *Aikuiskasvatuksen erityisongelmia yhdentyvässä Euroopassa (Adult education's special problems in an integrating Europe).* Aikuiskasvatus 1, 35-41.

Meisel, K. (1989). *Schlüsselqualifikationen in der Diskussion.* PAS. Frankfurt.

Morgan, G. (1986). Images of Organization. Sage. Beverly Hills.

Müller-Solger, H. (1990). Bildungspolitische Zusammenarbeit der Europäischen Gemeinschaft in Europe. *Zeitschrift für Pädagogik* 6, 805-826.

Pantzar, E. (1991). *Jatkuvaa koulutusta tunnistamassa [Identifying Permanent Education].* Departement of Adult Education and Youth Work. University of Tampere. Publications, 28.

Pantzar, E. (1994). *Finnische Weiterbildungspolitik im europäischen Kontext.* (Manuscript)

Piehl, E. (1993). Europäische Integration und berufliche Weiterbildung - Haupttrends in den neunziger Jahren. *Hessische Blätter für Volksbildung 1*, 33-35.

Raivola, R. (1994). Euroopan liiton koulutuspolitiikka ja aikuiskoulutus. [Educational policy and adult education in the European Union]. *Kasvatus* 1, 54-65.

Rubenson, K. (1989). Aikuiskasvatuksen tiedeluonteesta [On the scientific nature of adult education]. *Aikuiskasvatus* 2, 4-12.

Valtioneuvosto (1990). *Suomen koulutusjärjestelmä, koulutuksen taso ja kehittämislinjat [Finlands educational system, the level of education and development policies].* Helsinki.

Vnp (1978). *Valtioneuvoston päätös aikuiskoulutuksen suunnittelu- ja kehittämisperiaatteista [The Government's decision on the planning and development principles to be applied in adult education].* Helsinki.

Managers of their own Life and Learning

An Evaluation of an Euroform Project for long term unemployed Professionals aiming at Mobility in Europe

Jyri Manninen

Department of Education
University of Helsinki

Abstract

The article describes a transnational unemployment education programme which objective was access, orientation and mobility for jobs in the single EU market. The programme was targeted to long-term unemployed managers and professionals. Process evaluation, participant observation and an illuminative evaluation strategy was used to 'illuminate' problems, issues, and significant program features and to enable continuous program modification. The paper will discuss the problems, critical incidents, and the learning curve experienced during the project. It also describes how participant observation can be used as a means of process evaluation in innovative adult education programs.

Introduction

What happens when British long-term unemployed managers and professionals enter a humanistic learning environment in order to become mobile and employed in the single EU market?

This paper is based on process evaluation of a Euroform project which was established to help the participants to develop and maintain the necessary skills in order to become employed in other European countries. The paper will discuss the problems, critical incidents, and the learning curve experienced during the project. It also describes how participant observation

can be used as a means of process evaluation in innovative adult education programs.

This kind of innovative venture has no previous models to copy, and from the outset it was apparent that process evaluation has to be an integral part of the program. Three different evaluation models were combined to develop an illuminative (Parlett & Hamilton 1976) transformative (Kauppi 1992) rolling feedback (Brown & Evans 1990) evaluation strategy, in order to enable continuous program modification. 'Illuminative' evaluation involves intensive study of the program as a whole: its rationale and evolution, its operations, achievements, and difficulties. Research methods include observation, questionnaires, interviews, and analysis of documents, and they are all combined to help 'illuminate' problems, issues, and significant program features (Parlett & Hamilton 1976, 141). Evaluation information was actively circulated among organizers, tutors and learners, in order to (1) validate evaluators interpretation of issues, and (2) to enable and facilitate critical and transformative reflection of the learning process.

The evaluator was able to attend the group on a regular basis, which made participant observation possible. The aim was to get a feeling what is the participants' point of view and what those most directly concerned regard as the program's advantages and disadvantages, and what it is like to be participating in the scheme.

2. Euroform: background, organization and objectives

2.1 Euroform

Surrey University's Euroform[1] project is a part of a wider consortium developed with three other European universities[2] in order to develop unemployment education programs for access, orientation and mobility for jobs in the common labour market. The programs are targeted to long-term unemployed, socially excluded people. The aim is to analyze what kind of

---

1 EUROFORM is an European programme funded by European Social Fund. Criteria for projects is transnationality, innovativeness, labour market needs, and preparation for single market.

2 University of Limerick, Ireland; University of Surrey, UK; University of Oldenburg, Germany; and VUC Koege Bugt, Denmark. There is also a research input from University of Helsinki, Finland.

barriers (social, cultural, economical, individual) exist within the common labour market in EU.

The organization of the project consists of four independent but cooperating groups in each country. Each group has established a program to develop mobility skills within local framework. In Denmark participants are unemployed teachers, engineers, and lawyers, who wish to work in England. In Germany they are social scientists participating in a 15 months further education programme which include 10 weeks works placement abroad. The aim of the Irish project is to overcome mobility problems by setting up a mobility programme for trainers. The British Euroform group is based on the personal and career development and mobility of long term unemployed managers and professionals.

Each group will also scan the local labour market and create contacts with prospective employees in the area, in order to create job opportunities for other members of the project. E.g., British organizers will search for job opportunities for German and Danish participants, while, for example, the German counterpart will create contacts with businesses in Germany in order to develop job opportunities for British managers and professionals.

2.2 The British Euroform group

In the UK the southern part of England is worse hit by recession. Due to recession and structural changes in companies redundancies are more at middle-management level than before. It is often the older expensive employees that companies make redundant, and reemployment for that group is more difficult than for the younger applicants. Yet that group represents a tremendous amount of experience and skill.

Long-term unemployed managers and professionals have earlier been in positions of high status and income, and they often have difficulties in coping with alternative life styles. Unemployment is for many an unexpected and a new experience, and they have not developed the coping skills and strategies that can be found in other groups of unemployed adults. For example, they may have neither experience nor skills in job search.

The participants in the British group are long term (over 12 months) unemployed higher and middle managers and professionals (e.g. architects, engineers), with previous income ranging up to £60.000 in a year. They are highly qualified, but due to recession they have been unable to find jobs in the UK.

"I have sent mailshots to companies and employment agencies and I have replied to many advertisements for jobs - over 1000 in 14 months. Many replies each day, a good number of interviews - but no success so far" (Sales manager).

Initially 17 participants were accepted to the group. At the end of the first term (by Christmas 1992) one had become employed in France, one had a short term job in the UK and 8 active remained in the program for the second term. The programme lasted one year and a follow-up in March 1994 showed that three of the participants were still unemployed. Others were in further education (2), employed in the UK (2), or running own company. Anyhow, when the international recession is taken into account, in terms of re-employment the programme has therefore been relatively successful. Two of the participants were also offered jobs in Germany; the other one turned it down because the salary was too low (DEM 80.000). The other one failed to pass the employers medical examination.

2.3 Initial objectives

The aim was to provide long term unemployed managers and professionals with networking facilities, language training and support, orientation to different cultures, advice, guidance and support in order to create work opportunities in Europe, initially in Germany, Denmark and Irish Republic. The primary objective was to develop self-direction and give self-confidence, in order to activate the participants' own job-search and make them confident to seek employment in other countries by themselves. The project would provide travel expenses for participants for one interview, and support in the new country if necessary.

Figure 1 points out the preliminary needs and interests, means and intended outcomes of the Euroform project, from the point of view of the participants (bigger boxes) and project coordinators (small boxes). The figure describes also how the evaluation process fit in.

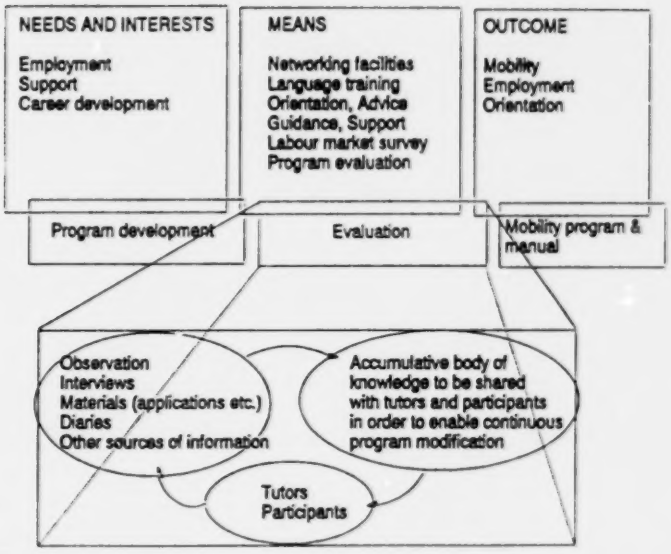


Figure 1. Initial objectives for the Euroform Group

3. What happened? Analysis of the process

3.1 First term

The program took place at a separate university institute, which has a long tradition in unemployment education. During many years the institute has developed a curriculum for the unemployed, including support groups, job-search skills and counselling. The unspelled but strong educational philosophy is a needs oriented, problem centred humanistic facilitation. This philosophy and educational practices are based on 'tacit' knowledge of adult learning, humanistic ideas, and pragmatism; this approach can be clearly defined as 'andragogigal' (Knowles 1980). Adult learning is seen as problem solving based on the current needs and interests of the learners.

Therefore, the study group was meant to take a very andragogigal form. The university offered two language teachers, counselling and networking facili-

ties according to individual needs, while the main responsibility would be on the learners themselves. One redundant personnel manager was employed to act as a facilitator. The starting point were the needs and interests expressed by the participants (Table 1).

Table 1. Felt needs expressed by participants

Access to job field (EC, UK)
* To find out likely sources of job; public /private/ multinational
Language learning
Job hunting skills
* CV-tuning
* Interview techniques
Cultural differences & working abroad
* Differences in management styles
* " culture
* " business
* Contacts to experts (University, companies)
* Standard terms of employment (pensions, social security, etc.)
Group therapy and experience sharing

The program was divided into four modules (language learning, group sessions, individual counselling, and networking facilities), which were designed to meet the felt needs. Each person could use the modules according to his personal needs.

The main activity during the first term was the meetings of the group (one day/week) and language tuition (German and Danish both 2 hours a week). In the group sessions the main topics during the first term were interview techniques, self-presentation skills, CV-tuning, and cultural differences. A trained counsellor was available for individual counselling and support.

Networking facilities included secretary services, telefax, telephone and use of international partners' help in job search. Foreign partners also helped to translate CVs and make them meet the national requirements and standards. Both unadvertised and advertised job opportunities in Germany and in Denmark have been scanned in each country, though this process actually started more actively at the beginning of 1993, when necessary

funding and organization of local Euroform groups took place in Germany and in Denmark. During the first term job hunting took place mainly through Danish, Irish and German newspapers.

3.2 The 'crisis'

Three major problems in the implementation were identified during the first term. First and most important: job search during the first term was ineffective, started too late and didn't involve the learners themselves. Due to misunderstandings and unclarity of objectives one of the main activities in the program therefore remained as passive job waiting. Someone said in the first session '*so we just wait the jobs to come to us*' when this matter was discussed. This problem was compounded since Euroform programmes and active job seeking in Germany and in Denmark did not start until 1993, when the British group had already been running for three months. The participants' best expertise and knowledge (executive job hunting) was ignored, which was in contradiction with the initial idea of self-direction and responsibility.

Even though individual program modules were assessed as mainly useful, the overall thrust in the project seemed to deteriorate towards the end of the year. There were requests to make the job hunting technique more practical and efficient. Some participants felt at the end of the first term that it had been a

> *"very slow-moving project, and have personally not felt yet that there is anything created in the pipeline."*

The initial planning of the project took place in a different economic situation. It was quite obvious that a shortage of labour force in some specific area might be filled by moving workers from one country to another (e.g. unemployed German science teachers recruited to England; Hobrough et al. 1991; Watts & Hobrough 1992; Manninen & Kontiainen 1991). When this group for unemployed managers and professionals was established in October 1992, the situation was different. Recession was an international phenomena, with high figures of unemployment in most of the participating countries. Deepening recession in Germany made the companies reluctant to employ any new staff. Job search was therefore a more demanding task, and perhaps not adequately organized in the onset.

The second problem relates to the humanistic model adopted and assumed by the organization. Both the facilitator and the participants had difficulties with this approach which is commonly seen as a very demanding method for

both 'students' and 'teachers' (c.f. Knowles 1985; Tennant 1986; Manninen & al. 1988). The role of the facilitator in managing the learning experiences is twofold: he is both "a strong procedural technician" and "a resource person or coach" (Knowles 1980, 239). The latter part in this case was well taken care of, since the facilitator had long experience in working and placing people abroad, and in interviewing. He was also an excellent lecturer and gave good presentations in interview techniques, but he had no experience in humanistic facilitation and was therefore unable to activate the participants. Main responsibility of organizing the group sessions and keeping contact with foreign partners (job search) remained on the facilitator:

> *"Course is too dependant on efforts of one man and his abilities to keep all the 'balls in the air'"*

Even though the facilitator was offered special support and guidance for his part, he was not able to take the full advantage of it during the first term. Expectations (both tutor's and learners') at the beginning and in many cases throughout the first term were that the group would act as a traditional course. This is understandable since training in the business world is usually organized in a traditional behaviouristic way, and we all have expectations to be 'trained' when we attend a 'course'.[3]

The humanistic nature of the group sessions was therefore criticised, and there were requests to organize the sessions in advance and to develop more structure. The facilitator's position was very difficult when he tried to meet the contradictory expectations of the group and those of the organization. As a result, the meetings were neither 'efficient lecturing' (as a reaction to organizations philosophy) nor 'supportive facilitating' (as he tried to fulfil the learners' expectations). From the participants' point of view these 'false' expectations led to see the group as a 'term of self-help' in a negative sense:

> *"There were no course modules or structure apparently, we seem to have had a term of self help."*

The third problem during the first term was the contradiction between university and business cultures, which caused some dissatisfaction. As opposed to effective business organizations, university was seen as a very

---

[3] The program was also advertised using terms 'course' and 'training'; facilitator's reports during the first term are full of expressions like 'training received', 'result of the coaching and tuition received'; this wording - though unintentional - gives an impression that training is something students receive passively, which is totally contradictory with the initial philosophy of humanistic facilitation.

bureaucratic and 'woolly' creature, where things disappear and get organized very slowly if at all. For example, language laboratory which was promised in the first session in October finally was available in February; Denmark promised to deliver books for Danish lessons, but they never arrived; not to mention job search. Partly these problems were due to communication and timing problems between the countries, partly due to the organizations 'humanistic' philosophy which assume the learners to be self-directed and active to organize things by themselves.

3.3 Second term: towards self-direction

Through the built-in feedback and evaluation loop these problems and contradictions were discussed throughout the term, and finally at the beginning of the second term it was apparent that the program had to be modified in order to meet the initial objectives. As a result, many changes took place in the project organization and in the group.

> *"The term began with a radical change of approach from the lecturing/tutoring style of the first term to a more self supporting/self-help mode, as had been the aim from the outset. The seating format was changed from a semi-circle to a pentagon shape to facilitate and emphasize this change. Further changes of plan were made as a consequence of a visit by two of the group to Germany. Their experience suggested that the limited Euroform budget would be better spent in financing a group visit on a fact finding / improved awareness visit than to fund a series of individual visits specially for the purposes of attending interviews." (Facilitators report)*

Visits and contacts to German employment agencies and employers also highlighted the need to revise CVs and related job application papers, which became one of the main activities during the spring term. The group was very active establishing contact - with help of foreign partners - to German Labour Office (ZAV), individual employers and management consultants in Germany and in Denmark. As a result, job search became more active and there was a significant improvement in the presentation of the job application papers. An increasing number of applications were made direct to foreign employers in their preferred format. As a final highlight one German employment officer said in March that *"these are the best CVs I have ever seen!"*.

During the second term the project organization became also more 'facilitative'; funding and organization of foreign partners was finally available, and their support was essential for creating contacts to official and

commercial entities. The language laboratory was made available for self-study, and a group visit to Germany and Denmark was funded. The facilitator was able to change his role and he received more support in his difficult role. As a result, the program became more effective and group motivation improved.

> *The program has been supportive and we have helped each other. The program has been constructive and x.x has performed well in a difficult task.*
>
> *I feel almost proud to be a member.*

3.4 Outcome and benefits

The participants experienced that the major benefits were language tuition, interview skills, getting together and discussion, further knowledge of other countries, opportunity to learn Danish, confidence in self-presentation and general skills. It was also useful for some to '*find out that it is difficult to get a job*' and to have routine and regular meetings with some challenge.

It can be stated that the effectiveness and quality of labour market training can not be measured in terms of re-employment rate, which is related to trends and economical climate, and in many cases on pure luck. Therefore, employment rate is a questionable measure of success and quality. Effectiveness of a training program should be more assessed from the qualitative point of view - how it improves the participants' self-direction, job search skills and self-confidence, and how the participants life situation changes during the program. Evaluation criteria should mainly be the facilitation of continuous maturing of every person and their engagement in self-directed inquiry. In this case the participants self-direction has improved significantly, and there has been many qualitative changes in application procedures and tactics. The participants agreed that the initial objectives were met:

> *I realised that my own initiative was necessary. I am more confident of my future direction now - Euroform has been a very positive factor.*
>
> *The group has been beneficial for feedback and communication on a number of issues. My CVs and letters have changed due to advice from Euroform and other seminars attended.*
>
> *I have been more positive in looking for jobs in the UK.*

Stronger, more pointed interviews.

My letters and CV have improved. More 'punchy' than previous. 'Klipp und klar'.

It should be noted that the long term benefits and tangible results are yet to come. The program effectiveness is largely based on these long term effects.

4. Some summary remarks

This learning process has been affected by many interrelated factors. First of all, the initial objective of the program (support in order to create self-direction and self-confidence in job search) was not clearly stated in the beginning, and therefore the participants' expectations were in a sense unrealistic (creation of job opportunities). Disappointment was inevitable. False expectations were fed with promises of job search in each country. However, problems in timing, funding and organization of international counterparts and the gloomy economic situation in Germany made cooperation more difficult than expected. In the learning situation, these problems were intertwined with the assumptions held by the organization (humanistic facilitation) and those of the participants' (training).

The programme has been an innovative development process for everyone; the project organization has developed towards facilitative environment, the tutor has developed quite unique facilitator skills, and last but not least, the participants have became more self-directed and active in their life and learning. And hopefully employed in the long run. The evolution of this process can be summarized as shown below.

	ORGANIZATION	FACILITATOR	LEARNERS
First term	Andragogy assumed	→Role conflict ←	Traditional training expected, other directed
'Crisis'	↓	↓	↓
Second term	Towards facilitative environment	Facilitator	Self-directed

References

Brown, A. & Evans, K. (1990). Rolling feedback strategy: an approach to evaluation in dynamic contexts. *Evaluation and Research in Education*, 4, 1, 129-145.

Hobrough, J. & Pope, M. & Watts, M. (1991). *The recruitment and retention of German teachers to secondary schools in the UK: the Surrey/Oldenburg project 1989-90*. Department of Educational Studies. University of Surrey.

Kauppi, A. (1992). Towards transformative evaluation of training. In: Parjanen, M. (ed.) *Legitimation in adult education.* University of Tampere, Institute for Extension Studies, Publications A2/92.

Knowles, M.S. (1980). *The modern practice of adult education*. Chicago: Follett.

Knowles, M.S. (Ed.) (1985). *Andragogy in action.* San Francisco: Jossey Bass.

Lipps, G. & Grant, P. (1990). A participatory method of assessing program implementation. *Evaluation Review*, 14, 4, 427-434.

Manninen, J. & Kauppi, A. & Kontiainen, S. (1988). *Adult education planning. An analysis of Knowles' andragogy as a model for adult learning and teaching.* University of Helsinki, Department of Education, Research Report Nr. 116. (in Finnish).

Manninen, J. & Kontiainen S. (1991). Individual Life Situations and Mobility in European Labour Market. Case Studies of German Science Teachers as Teachers in England. *Fourth European Conference for Research on Learning and Instruction*, August 24-28, 1991, Turku, Finland.

Parlett, M. & Hamilton, D. (1976). Evaluation as illumination: A new approach to the study of innovatory programs. In: *Evaluation studies review annual I*, Gene V. Glass (ed.), 140-157. Beverly Hills, CA: Sage.

Tennant, M. (1986). An evaluation of Knowles' theory of adult learning. In: *International Journal of Lifelong Education*, 5, 2, 113-122.

Watts, M. & Hobrough, J. (1992). The employment of German science teachers in the UK: positive holes and the crystal lattice? *SSR, Mar 1992*, 73 (264), 27-32.

WORK, TRAINING AND JOB-RELATED EDUCATION

Trends in Employer funded Training as an Indicator of Changes in Employment

The Case of Norway in the 1980s

Paul Gooderham
Kjell Hines

University of Trondheim

Abstract
The article examines trends in employer funded training during the 1980s in relation to the two major theses on employment, the neo-Marxist degrading thesis and the liberal upgrading thesis. We also propose a third thesis, the bipolarisation thesis. The article distinguishes between the private and public sectors. With regards to the former we find no support for the degrading thesis. We note in particular that while the private sector engaged in a redistribution of training to its lower ranks no such trend can be identified in the case of the public sector.

Introduction

The purpose of this paper is to contribute to the debate on the direction of long term changes in employment. The debate comprises two main competing theses, the neo-Marxist degrading thesis and the liberal, technical-functionalist, upgrading thesis. In addition we suggest a third subsidiary thesis, which we label the bipolarisation thesis, which represents an alternative to the Marxian critique of the upgrading thesis. To test these theses we will trace and analyse changes in Norwegian employers' allocation of training between 1982 and 1990, the first part of which was characterised by substantial increases in firms' expenditure on training (see NAF, 1985, Eeg-Henriksen & Mikkelsen, 1986). In particular we will examine the degree to which employer sponsored skills-upgrading is increasingly restricted to the upper echelons of the work organisation, contributing *inter alia* to the proletarianisation of low-level white-collar employees. This is, after all, what

the Marxian degrading thesis would have us suppose (Braverman, 1974; Crompton & Jones, 1984). Opposed to this is the assumption derived from the upgrading thesis that, because of the increasing complexity of technology, regular access to new skills is increasingly a feature of all jobs regardless of level (Bell, 1974).

Our analysis contains a number of supplementary theoretical considerations. We emphasise that as the two main theses of employment were evolved with reference to sectors in which market principles are operative, their overall relevance is limited in a country such as Norway with its substantial public sector. We will contend that there is a need in an analysis of employer investments in training to study the public and private sectors separately. We also argue that part-time employees will be marginal to employers' training strategies, likewise older private sector employees.

The two main theses of change in employment

In one of the few studies that has adopted a long term perspective on career outcomes of work-related adult education, Tuijnman (1989) contends that there are channels of mobility in the form of work-related adult educational opportunities available to adults that increasingly function independently of both current and previous status. He argues that the concept of the linear career is becoming problematic so that models of status attainment will increasingly have to include adult educational opportunities as forces in their own right. We regard Tuijnman's perspective, one he shares with so many other adult educators (see, for example Cross, 1981), as constituting an extension of the technical-functional theory of education (see, for example, Kerr *et al.*, 1960). At the societal level, technological change is steadily creating jobs that require new, higher-level skills. Competition for these new positions is open to anyone who can demonstrate that they have acquired the relevant skills, with skills access being steadily more available. Furthermore, substantial numbers of low-level, unskilled jobs that already exist are being upgraded and with them, as a consequence of training, their holders.

The neo-Marxist (see, e.g. Braverman, 1974) response to these twin assertions has been that technological change, for most employees, involves a narrowing and erosion of the skills they have traditionally brought to their tasks. In other words, employers will steadily set less store by skills and more on a willingness by the bulk of their work-forces to perform routine tasks. Any employer-funded training that is carried out will be limited to those in what Wright *et al* (1982) termed *contradictory* class locations,

particularly senior executives, middle-level managers and technical experts. Deskilling, in terms of both content and autonomy, will be a particular characteristic of work tasks assigned to clerical grades as the effects of new technology impinge. The long term consequence of this development is that the objective reality of the tasks assigned to these grades will be increasingly indistinguishable from those performed by unskilled manual workers. Thus in class analyses employing Wright's (1982) Marxian class schema, these grades are assigned to the working-class along with an array of personal service occupations (e.g. Colbjørnsen *et al*, 1987). Because a considerable, and steadily increasing, proportion of clerical grades are now occupied by women, and because of the expansion in female dominated personal services, the implication is that women are forming an expanding proportion of the working-class (Crompton & Jones, 1984).

The "flexible" organization and post-industrial society

Recent theoretical developments with respect to changes in the structure of employment tend to bear the imprint of the liberal upgrading thesis (Esping-Andersen, 1993a). However, the sweep of focus is no longer confined to the evolution of industrial employment. Indeed new developments stress on the one hand the decline in manufacturing and on the other the shift in employment towards the post-industrial service sector.

With regards to the decline in employment in manufacturing, it is argued that this is in part ascribable to technological change "massively" reducing labour inputs, and in part to the globalisation of production with routine assembly work increasingly located to low-wage economies (Crompton, 1993). Within the advanced economies what remains of manufacturing is increasingly characterized by a shift from "Fordist" to "post-Fordist" methods of production with the hierarchical organization being superseded by the "flexible" organization (Walker, 1992), and the mass worker by the multi-skilled and autonomous worker. Thus "the boundaries between the worker, manager and the technician may be eroding" (Esping-Andersen, 1993a: 21). The implication of the rise of the multi-skilled worker for training is that companies will be expanding these employees' skills portfolios.

Somewhat at odds with the upgrading implication of the development of the flexible organization is, however, the case of part-time employment, the vast bulk of which is assigned to women. Inasmuch as these employees primarily service non-core, low-skill functions in the enterprise, we cannot expect that they will be embraced by any general trends towards skills enhancement.

Thus as multi-skilling progresses, the skills gap between full-time and part-time employees will polarize.

Following on from this distinction between part-time and full-time employees, we would also point out that the upgrading thesis fails to take into account a further possible long term outcome of technological change, *viz.* task elimination. Indeed Penn & Scattergood (1985: 619) observe in industry "widespread elimination of labouring tasks" as a result of mechanization and with it redundancies. In other words while technological change is producing "enskilling", as Penn (1992) terms it, it is also generating job loss.

Labour which is shed or which is never hired by manufacturing or those parts of the economy which directly contribute to it, is confronted by a number of post-industrial alternatives. A portion will service the industrial economy independtly supplying for example specialized professional services on a contractual basis. Such opportunities will be limited though to those with higher levels of education, persons who would have relatively little difficulty in finding employment within the upper reaches of the credential conscious public sector. For those lacking specialized higher education the nature of the major available opportunities will not least be contingent on the degree to which the welfare state intervenes in the labour market (Esping-Andersen, 1993a). A private low-pay leisure service sector will be less a feature of a post-industrial economy if there is a large expanding public sector, state financed long-term training opportunities and early retirement schemes. Thus in the case of Norway, although there is evidence that private sector enterprises since the late 1970s increasingly forced older employees to take early retirement (Bø, 1989; Foss & Nilsen, 1993) and thereafter, as the previous decade progressed, engaged in a more fundamental rationalization of jobs,[1] there has been none of the pronounced increase in low paid, casualized, non-unionized private sector service employment one associates with the United States. However, to the extent it does emerge, we may expect that it will be training impoverished because the only skill required of its constituents is some degree of customer sensitivity.

A far more pertinent characteristic of the 1980s than the private leisure services sector in the Norwegian context derives from the active intervention of the welfare state. During the latter stages of the decade in particular there were substantial increases in government funded training schemes (Gooderham & Nordhaug, 1993), temporary employment schemes, and places in further and higher education.[2] In addition there were significant increases in public sector employment (Bø, 1989; Foss & Nilsen, 1993).

Indeed the latter has come to represent a steadily more important sector of employment. As international comparisons make clear, there is of course nothing inevitable about the emergence of such a sizeable public sector. It is a product of political decisions peculiar to the Scandinavian welfare state regimes (Esping-Andersen, 1990).

The character of the public sector

Although the Norwegian public sector currently employs some thirty per cent of the country's labour force, beyond remarking that it is heavily geared to the provision of social services and that it has facilitated the emergence of high levels of female participation in paid employment, its nature is not commonly the object of any sustained theoretical scrutiny. The two competing employment development theses we have outlined are formulated with reference to the private sector and are therefore not necessarily applicable. Likewise international discussions of the post-industrial sector focus either on the emergence of an elite of professional experts (see e.g. Bell, 1974) or to what Esping-Andersen (1993a) refers to as the "consumer service proletariat". Rarely is the case of the public sector employee directly addressed.

In terms of its general character we would be inclined to argue that the Norwegian public sector, not least because it in recent times has operated in a relatively stable environment, conforms more closely to the bureaucratic organizational form identified by Weber (1947) than does the private sector.[3] This would appear to be borne out by the public sector's more pronounced use of certified educational qualifications as a criterion of appointment as well as its more formalized bureaucratic principles of promotion and service (Gooderham & Dale, 1994). Stable as the environment of the public sector has been with regards to external competition, it nevertheless contains an internal training dynamic in that substantial numbers of its employees view themselves as professionals. That is they have a perception of their skills as being based on a body of theoretical knowledge that is constantly evolving. In other words it would seem reasonable to suppose that there exists a general training ethos in the public sector that, budgets permitting, will serve to promote training irrespective of strictly organizational needs. Indeed Gullichsen (1992), in her analysis of training in the Norwegian communes, concludes that training is overwhelmingly geared to meeting employees' professional needs rather than the communes' purported strategic goals.

However, precisely because of the stable nature of its environment, coupled to its credentialist division of labour, we must not suppose that this drive towards training expansion will be accompanied by any radical redistribution of training. Unlike the flexible organization of the private sector, which will be seeking to multiply the skills of its employees at the lower levels, we must expect that for the public sector the correlation between seniority of position and training access is somewhat more fixed.

Age and part-time employment

Thus far our comparison of the private and public sectors has centred on training allocation in relation to position in the organizational hierarchy. Let us now consider age and part-time employment. That the former should be of some relevance to firms' training decisions (Knudsen & Skaalvik, 1979) may be deduced from human capital theory (Schultz, 1961; Becker, 1964). Derived as it is from neo-classical economics, "in human capital theory, focus has primarily been set on *investment* in human resources and *returns* on such investment" (Nordhaug, 1993: 19).[4] Thus it would predict that firms select only those personnel for training whose resultant development will confer benefits on the firm which exceed the training outlay. From this it would be argued that employers view workers as having a finite range of years in which investment may be made. They are therefore reluctant to invest in the training of older people because their remaining working lives are shorter. It may also be the case that as it is popularly believed that older people have a diminished learning ability (Habib, 1985) employers will prefer to invest in the development of younger employees.

However, we would argue that while such neo-classical economic calculations may be a feature of the private sector, their relevance is questionable in the case of the public sector. In fact some preliminary research suggests that age as a career discriminator may be more a feature of the private sector than the public sector (Gooderham & Dale, 1994). This we contend stems in part from the public sector's more bureaucratic conditions of employment. It offers virtual tenure to its employees, redundancies being virtually unknown, and rarely evaluates its employees' performances except when considering promotion, thus precluding demotion. Thus training will tend to accrue to positions rather than to the individuals who occupy them.

Esping-Andersen (1993b) argues that female and male careers are, and increasingly will be, segregated, with the public sector being the domain of women. Thus in the public sector, with its "moderate" preferential

treatment for women competing for positions at management/professional levels, there exists "an internal mobility hierarchy...that grants (women) the opportunities to design career paths regardless of child and family obligations" (Esping-Andersen, 1993b:238). However, we should firstly bear in mind that though women clearly experience difficulties in obtaining full-time private sector employment at management level, there is also some evidence that indicates that the small minority who do are not thereafter subjected to discrimination (Gooderham, 1992). Secondly, it must also be borne in mind that the public sector employs considerable numbers of part-time employees, particularly at the unskilled levels, the vast majority of whom are female (Ellingsæther, 1989). There is currently no reason to suppose that these are any less marginal in training terms than those located in the private sector.[5] In other words we may surmise that the most important distinction is no longer between men and women, but rather between on the one hand men and women with continuous, full-time careers, and on the other hand women with disjointed, part-time careers.

Propositions to be tested

The primary aim of our empirical analyses is to examine changes in frequency of the selection for employer financed training with particular reference to rank. In addition age and career type (i.e. full-time contra part-time employment), the latter being a heavily gendered determinant, will be considered. Changes in training decisons we have argued will be a product of sector of which we have distinguished two main sectors, the traditional private sector and the public sector, and a minor sector, the private leisure services sector. Let us now summarize our propositions.

Rank

Our discussion of rank and training in the private sector has resulted in three propositions, one of which is in direct opposition with the other two. On the basis of the neo-Marxist deskilling thesis we would expect that routine non-manual workers will suffer decreasing levels of training participation. Opposed to this is the upgrading thesis which argues that, on the contrary, technology promotes skills development. Thus there will be a general rise in training at all levels perhaps not least amongst routine non-manual workers inasmuch as these grades are particularly exposed to the impact of new technology. In its emphasis of the multi-skilled worker, flexible organization theory may be regarded as a variant of the upgrading thesis. It suggests that there will be a broadening of skills amongst manual grades,

which in turn will result in their increasingly being embraced by company training.

Turning to the more bureaucratic public sector, we would expect that any growth in training will display a relatively stable hierarchical character.

Age

Human capital theory indicates that age will be applied by employers in training allocation decisions. We see no reason to suppose that any modification has occurred to this practice in the private sector. However, because of its bureaucratic career structure, age, we would propose, will not function as a determinant of training allocation in the public sector.

Gender and time

Gender is often cited as a factor which will be pertinent to employers' human capital investment decisions. However, because of the active introduction of anti-sexist policies prior to the 1980s we propose that it is unlikely that full-time women employees in the public sector will have experienced any discrimination in training allocation during this decade. On the other hand, there is little to suggest that the lot of part-time employees has improved. As regards the private sector, for which human capital theory would seem more apposite, we have proposed that gender may be losing its direct role as a discriminatory factor. That is, the distinction private sector employers make in training decisions is between full-time (i.e. core) and part-time, (i.e. marginal) employees. However, we are conscious that part-time employees are invariably women.

The private leisure services sector

The thrust of our analysis of this limited yet burgeoning sector, which embraces health studio employees, waitresses, hairdressers, beauticians, etc., has been at the sector level. We have proposed that although changes in taste and fashion will dictate some degree of skills development, this is a low technology sector also lacking in the professionalisation of the public sector. Therefore training investment will be limited.

Data and variables

We address our empirical aims on the basis of survey data from the Norwegian Survey of Living Conditions for the years 1982, 1986 and 1990. We derive our code of *employee rank* from the Norwegian "Standard Classification of Socioeconomic Status" (Central Bureau of Statistics, 1984). It is the outcome of a series of categorizations that results in five socioeconomic categories of employees as well as a number of non-employee categories which are not included in the analysis. Thus our five employee ranks are:

I unskilled manual workers;
II skilled manual workers;
III routine non-manual employees;
IV & V lower and higher professionals and managers.

In essence, ranks I and III, that is unskilled manual workers and routine non-manual employees, comprise fundamentally unskilled positions, while the other ranks contain those positions which to a greater or lesser extent are skill based. This applies not least to ranks IV and V, that is categories of employees which span not only managers but also such categories as engineers, accountants and marketing staff.

Employer funded training is a dichotomous variable which distinguishes those employees who had been allocated work-related training or education during normal working hours in the year of the survey from those who had not.

Part-time/full-time employment is a dichotomized variable. Part-time employment is defined as paid employment in the individual's primary job of 29 hours or less per week, full-time as 30 hours or more. We have preferred to combine this variable with *gender* since only about 5 percent of the male employees in our data work part time, while this concerns from 44 percent in 1982 to 35 percent in 1990 of female employees. The distinction between full and part time work is thus only applied to women.

Age is a dichotomized variable that differentiates employees of 49 years or less from those who are between 50 and 67 years of age. While partly intuitive, the choice of 50 years of age as a dividing line primarily stems from previous research which indicates that a decline in participation in employer funded training sets in around this point in the career cycle (Knudsen & Skaalvik, 1978).

Finally, we have distinguished three *sectors of employment*:

i) The "traditional" private sector (manufacturing, the building trades, transport, quarrying, mining, financial services, the retail trade),
ii) The public sector,
iii) The private leisure services sector (beauty salons, health studios, bars, cafes, hair salons, restaurants, courier services, etc.).[6]

Within the traditional private sector it will be noted that we have chosen to include not only manufacturing but also sections of the more traditional services sector such as banking as well as the building trade and communications. This may appear to be a somewhat disparate categorization particularly with regards to the inclusion of financial institutions. However, it should be borne in mind that technological innovation was no more in evidence than in the case of the banking sector during the 1980s.[7]

Empirical Results

General findings

Tables 1a and 1b indicate that growth in training access as measured by the mean has been common to both of the main sectors of the economy throughout the period 1982-90. However, their respective trajectories are very different. As Table 1a shows, in the traditional private sector after relatively strong growth between 1982 and 1986 there was only marginal growth. We would choose to interpret this slow-down as a response to the recessionary economic climate at the end of the decade.[8] In contrast, Table 1b indicates that the growth in the mean participation rate in the public sector was more or less constant throughout the decade, thus underscoring the different logic operating in these sectors.

Rank

Turning to the subject of the distribution of training by rank in the two main sectors, the reduction in the sizes of the measure of association, the *spearman rank correlation*, from .29 to .18 in Table 1a indicates a marked narrowing of differences by rank within the traditional private sector. This was in part because ranks V and IV (upper and middle managers) were no more likely to receive training in 1990 than in 1982, but also because ranks I (unskilled workers) and III (routine non-manual) substantially increased

their likelihood of receiving training throughout the period. In the case of rank I its rate of participation trebled between 1982 and 1990, whereas for rank III there was a doubling. Both of these two developments are firmly at odds with the proposition derived from the degrading thesis. Indeed the findings on routine non-manual workers would appear to be in line with the upgrading thesis, whereas the former is what we would expect on the basis of the flexible organization thesis.

Table 1a: Proportion of traditional private sector employees who received training by rank, 1982, 1986, 1990

	1982		1986		1990	
V	7.5%	(112)	42.1%	(95)	39.2%	(97)
IV	34.4%	(241)	41.4%	(379)	35.8%	(374)
III	9.8%	(193)	17.4%	(224)	20.9%	(177)
II	17.8%	(197)	25.5%	(161)	24.4%	(172)
I	5.8%	(328)	13.7%	(307)	16.9%	(231)
Mean	18.5%	(1071)	27.4%	(1166)	27.6%	1051)
Spearman correlation	.29		.25		.18	

Table 1b: Proportion of public sector employees who received training by rank, 1982, 1986, 1990

	1982		1986		1990	
V	1.5%	(147)	48.3%	(180)	55.6%	(169)
IV	30.7%	(306)	41.0%	(324)	50.8%	(315)
III	14.4%	(153)	22.4%	(165)	33.6%	(146)
II	22.9%	(70)	22.4%	(58)	30.5%	(59)
I	9.0%	(133)	16.0%	(94)	22.9%	(83)
Mean	25.3%	(809)	34.7%	(821)	44.0%	(772)
Spearman correlation	.25		.24		.23	

In the public sector though, as Table 1b shows, there is virtually no reduction in the *spearman rank correlation*, indicating that rank based differentials in training access were largely maintained throughout the

decade. This result would in no small part appear to be due to the increased rate of participation amongst rank 4 employees whose absolute size off sets the effect of the even more dramatic increases for ranks I and III on the association between rank and training.

Thus whereas at the beginning of the decade the association of training with rank as measured by the *spearman rank correlation* was rather greater in the private sector than in the public sector, by the end of the decade this had been reversed. Moreover, whereas the allocation of training to the two upper ranks grew in the public sector throughout the period, some decline was experienced in the private sector between 1986 and 1990. The contrasting development in these two sectors confirms the necessity of treating these two sectors separately.

Age

Table 2a and table 2b enables us to examine for changes in the effect of age on training allocation in each of the two major sectors. The tables indicate that while the absolute training frequencies for both age categories has increased for both sectors, in the public sector age ceased to have any influence on participation from 1986, unlike in the private sector where age appears to be of some importance throughout the decade.

Table 2a: Proportion of traditional private sector who received training by age (under 50 years of age/ 50 years or over), 1982, 1986, 1990

	1982		1986		1990	
16-49	20.5%	(830)	9.1%	(949)	29.9%	(853)
50-66	11.6%	(241)	19.8%	(217)	17.7%	(198)
Mean	18.5%	(1071)	27.4%	(1166)	27.6%	(1051)
Spearman correlation	.10		.08		.11	

Table 2b: Proportion of public employees who received training by age (under 50 years of age/ 50 years or over), 1982, 1986, 1990

	1982		1986		1990	
16-49	29.0%	(587)	36.2%	(621)	44.5%	(593)
50-66	15.8%	(222)	30.0%	(200)	42.5%	(179)
Mean	25.5%	(809)	34.7%	(821)	44.0%	(772)
Spearman correlation	.14		n.s.		n.s.	

Gender and time

Table 3a indicates that there has been an absolute rise in training frequency for each of the three employee groupings in the private sector, men, full-time women employees and part-time women employees. By 1986 the gap between the first and second of these groups had disappeared. As for the third group, although clearly less likely to receive training in 1990 than the other two, its relative position had steadily improved since 1982. In other words, although there remains some degree of bipolarisation in 1990, the trend is actually in line with the upgrading thesis.

The findings for the public sector are similar. Although part-time women employees are clearly significantly less likely to be allocated training, they enjoyed both a relative and an absolute improvement during the 1980s.

Table 3a: Proportion of traditional private sector employees who received training by gender and time, 1982, 1986, 1990

	1982		1986		1990	
Men	20.8%	(744)	29.4%	(749)	28.5%	(692)
Women, full time	16.6%	(199)	28.5%	(284)	29.5%	(254)
Women, part time	7.8%	(128)	13.5%	(133)	17.1%	(105)
Mean	18.5%	(1071)	27.4%	(1166)	27.6%	(1051)
Spearman correlation	.10		.08		n.s.	

Table 3b: Proportion of public sector employees who received training by gender and time, 1982, 1986, 1990

	1982		1986		1990	
Men	32.7%	(361)	43.5%	(331)	50.0%	(310)
Women, full time	30.3%	(238)	36.9%	(293)	50.2%	(285)
Women, part time	7.1%	(210)	16.8%	(197)	23.7%	(177)
Mean	25.3%	(809)	34.7%	(821)	44.0%	(772)
Spearman correlation	.22		.20		.17	

Private Leisure Services Sector

In view of the limited size of the sample at our disposal there can be no detailed bivariate analysis of training trends by rank amongst private leisure services sector employees. What may be tentatively gleaned from table 4 is that training of the unskilled ranks, I and III, is in 1990 apparently a much rarer occurrence than in the main private sector. In fact table 4 suggests that training in general in this sector is, as we anticipated, considerably less frequent than in the two main sectors. In 1990 average participation was little more than a third of that found in the main private sector and only a quarter of that of the public sector. This finding supports our proposition that this is a training impoverished sector. Nevertheless, it may be noted that its absolute training level increased between 1982 and 1986 contributing to a narrowing of the gap to the other sectors.

Table 4: Numbers of private leisure services sector employees who received training by rank, 1982, 1986, 1990

	1982		1986		1990	
V	-		-		-	
IV	2	(24)	10	(33)	5	(34)
III	2	(42)	3	(41)	5	(47)
II	0	(5)	0	(5)	2	(11)
I	1	(25)	1	(38)	1	(26)
Mean	4.2%	(96)	12.0%	(117)	11.0%	(118)

Conclusions and discussion

The private sector

The analysis indicates that the neo-Marxist degrading thesis is ill-suited to explain. It seems that in the traditional private sector the general expansion in training distribution during the previous decade was strongest amongst unskilled manual and routine nonmanual employees. These findings bear out the upgrading thesis and, not least, its flexible organization variant.

Evidence for the bipolarisation alternative to the upgrading thesis is also limited. In particular we have observed that the relative underrepresentation of female part-time employees in training declined, although clearly they remain a marginal group. Similarly, although leisure service employees are marginal in that this sector provides definably limited opportunities for skills enhancement, this marginality appears to be declining.

However, we should be wary of adopting too uncritical an acceptance of the upgrading thesis by viewing our findings in a broader perspective than that adopted by our analysis. Ideally our analysis should also have taken into account contractions within the traditional private sector, particularly prevalent amongst unskilled employees. Low-level employees, both full-time and part-time, may well be receiving more training, but on the other hand there are steadily fewer of them (Penn & Scattergood, 1985; Goldthorpe, 1990). Thus because of job-loss significant pockets of the labour force have been effectively precluded from gaining access to the upgrading process, at least in the private sector. For this reason we cannot entirely reject the bipolarisation perspective.

The public sector

One general finding on the public sector that is particularly significant is that whereas growth in training ground to a halt in the private sector in 1986 in the wake of the economic down-turn, it continued to expand in the already training rich public sector. Thus, as we argued, while the private sector clearly does respond immediately to market forces, the public sector apparently does not. Furthermore, against the backdrop of the pressures towards early retirement in the private sector during the 1980s, the lack of ageism in the public sector from 1986 as indicated by training allocation might be construed as yet another measure of its protected status.

We note also that while the market driven private sector redistributed training by actually decreasing its professionals and managers participation rates between 1986 and 1990, no such forces operated in the public sector to curtail the demand for training by its relatively large professional and managerial levels. Clearly these groups are able to exert a powerful influence on their organizations for their continuing education.

Finally, our findings indicate that while the public sector greatly narrowed the cleft in training allocation between its expanding armies of part-time women employees and full-time employees, the gap in 1990 nevertheless indicates that the purportedly anti-sexist public sector is still indirectly heavily bifurcated by gender.

Notes

1 According to NHO, the Norwegian employers' federation, a net total of 68,000 jobs in industry disappeared in the period 1987-92.

2 E.g. the number of students at the University of Trondheim increased by some 70% from 9,000 in 1986 to 15,000 to 1992. This level of expansion is by no means exceptional for the Norwegian higher education sector.

3 In support of this contention we would point out that post-Weberian organization theory suggests that the bureaucratic form of organization is more a feature of organizations operating in stable environments where product reliability is more important than innovation (Burns, 1963; Handy, 1981).

4 Our emphasis.

5 Presenting its recent findings on this issue, the trade union, Yrkesorganisasjonenes Sentralforbund, claimed that low rates of employer funded training are endemic to part-time employment regardless of sector (Adresseavisen, 20-10-93).

6 This is operationalized as private sector employees belonging to group 9 of the Nordic classification of occupations (Labour Office, 1965).

7 Of all the sectors investigated by the consultants West Norway Engineering A/S in 1985 on behalf of the regional labour market authorities, banking was the sector where increasing competency demands and task ugrading were most in evidence. They found for example that clerical staff were being offered retraining for administrative functions. Presumably these observations stem from the large numbers of routine tasks that were in the process of vanishing as a consequence of the computerization that Dahl (1985) observed. Such "process redesign" was also very much apparent in the retail trade.

[8] OECD figures for Norwegian GDP, cited in *The Economist* (1993), show how the Norwegian economy plunged into negative growth in 1988 followed thereafter by growth of under half the OECD average.

References

Adresseavisen (1993), 20-10-93.

Becker, G. (1964). *Human Capital.* New York: National Bureau of Economics.

Bell, D. (1974). *The Coming of Post-Industrial Society.* New York: Basic Books.

Braverman, H. (1974). *Labour and Monopoly Capitalism: The degradation of work in the twentieth century.* New York: Monthly Review Press.

Burns, T. (1963). Mechanistic and organismic structures, *New Society*, 31.01.63. Reprinted in D.S. Pugh (ed.) Organization Theory, 2nd. edition, 1984, Harmondsworth: Penguin.

Bø, T. P. (1989). Arbeid (Employment). *Social Survey 1989.* Oslo-Kongsvinger: Central Bureau of Statistics.

Central Bureau of Statistics (1984). *Standard Classification of Socioeconomic Status.* Oslo - Kongsvinger: Author.

Colbjørnsen, T. et al. (1987). *Klassesamfunnet på hell.* Oslo: Universitetsforlaget.

Crompton, R. (1993). *Class and Stratification. An Introduction to Debates.* Cambridge: Polity Press.

Crompton, R., & Jones, G. (1984). *White-Collar Proletariat.* London, Macmillan.

Cross, K.P. (1982). *Adults as Learners.* San Francisco: Jossey-Bass.

Dahl, D. (1985). *Bedriften som læringsmiljø* (The Company as a Learning Environment). Trondheim: Norwegian Institute of Adult Education Research.

Doeringer, P. B., & Piore, M.J. (1971). *Internal Labor Markets and Manpower Analysis.* Lexington, Mass.: Heath.

The Economist (1993). *Norwegian Economy.* Vol. 327, no. 7805, p. 112.

Eeg-Henriksen, F. and Mikkelsen, L.N. (1986). Bedriftene satser (Companies are investing). In O. Hauglin and S. Vansnes (ed.) *Fra Katedral til børs - privatisering av høyere utdanning* (The Privatisation of Higher Education). Working papers 7/86. Oslo: NAVF's utredningsinstitutt.

Ellingsæter, A.L. (1989). *Normalization of Part-time Work. A Study of Women's Employment and Working Time Patterns in the 1980s.* Oslo-Kongsvinger: Central Bureau of Statistics.

Esping-Andersen, G. (1990). *The Three Worlds of Welfare Capitalism.* Cambridge: Polity Press.

Esping-Andersen, G. (1992). Post-industrial Class Structures: An Analytic Framework. Paper presented for the ISA Committee on Stratification and Mobility: General Issues. University of Trento, (May).

Esping-Andersen, G. (1993a). Post-industrial Class Structures: An Analytical Framework. In G. Esping-Andersen (ed.) *Changing Classes.* London: Sage.

Esping-Andersen, G. (1993b). Mobility regimes and class formation. In G. Esping-Andersen (ed.) *Changing Classes.* London: Sage.

Foss, O., & Nilsen, E. (1993). Regionale trender på 1980-tallet (Regional trends during the 1980s). *Regionale trender*, 1/93, p. 45-53.

Goldthorpe, J.H. (1990). Employment, class and mobility: A critique of liberal and Marxist theories of long-term change. Paper presented at the first National Norwegian Conference on Sociology, Geiranger (May).

Gooderham, P.N. (1992). Adult Education as a Channel of Social Mobility. Unpublished doctoral dissertation. Department of Sociology and Political Science, University of Trondheim.

Gooderham, P.N., & Dale, P.N. (1994). The Second Rate Second Chance? A Comparison of the Fates of Mature Graduates in the Labour Market in Britain and Norway. *International Journal of Lifelong Education* (forthcoming).

Gooderham, P.N., & Nordhaug, O. (1993). The Norwegian continuing education system. In A. Kaiser (ed.) *Europa-Handbuch Weiterbildung*. To be published in August by Luchterhand-Verlag.

Gullichsen, A.H. (1992). *Strategisk kompetanseutvikling eller profesjonsstyrt etterutdanning?* (Strategic Human Resource Development or Continuing Education for Professionals?). Trondheim: Norwegian Institute of Adult Education.

Habib, J. (1985). The economy and the aged. In R. H. Binstock & E.Shanas (eds.), *Handbook of Aging and the Social Sciences*, 2nd ed.. New York: Van Nostrand-Reinhold.

Handy, C. (1981). *Understanding Organizations*. Harmondsworth: Penguin.

Kerr, C. *er al.* (1962). *Industrialism and Industrial Man*. London: Heinemann Educational Books.

Knudsen, K., & Skaalvik, E. (1979). *Deltakelse i voksenopplæring* (Participation in Adult Education.) Trondheim: Norwegian Institute of Adult Education Research.

Morris, B. (1992). Every Worker's Right to Training. *Training & Development*, vol 10 (4), p. 3.

NAF (1985). *Bedriftenes indirekte ("sosiale") personalkostnader* (Companies' Indirect ("social") Employeee Expenditure). Oslo: Norsk arbeidsgiverforening.

Labour Office (1965). *Nordisk yrkesklassifisering*. Oslo: Author.

Penn, R., & Scattergood, H. (1985). Deskilling or enskilling?: an empirical investigation of recent theories of the labour process. *British Journal of Sociology*, vol 36, no. 4, p. 611-630.

Penn, R., et al. (1992). Technical change and the division of labour in Rochdale and Aberdeen: evidence from the social change and economic life initiative. *British Journal of Sociology*, vol 43, no. 4, p. 657-680.

Schultz, T.W. (1961) Investemnt in human captital. *American Economic Review*, 51, 1-17.

Tuijnman, A. (1989). *Recurrent Education, Earnings, and Well-being: A Fifty-Year Longtitudinal Study of a Cohort of Swedish Men*. Stockholm: Almquist & Wiksell International.

Walker, J.W. (1992). *Human Resource Strategy*. New York: McGraw-Hill.

Weber, M. (1947). *The Theory of Social and Economic Organization*. New York: Bedminister Press, 1968.

West Norway Engineering AS (1985). Organisering av arbeidsmarkedsopplæringen i Ålesund (The Organisation of Labour Market Training in Ålesund). Unpublished report for the labour market authorities for the county of Møre og Romsdal.

Wright, E.O. *et al.* (1982). The American Class Structure. *American Sociological Review*, 47, 709-726.

Human Capital: Who invests and why?

Roald Sand

University of Trondheim, Norway

Abstract

The article is a summary of a paper written in conjunction with an undergraduate course in sociology, autumn 1993. The purpose of the article is to describe the dispositions of various social groups to invest in job-related adult education (hereafter refered to as JAE) in their leisure time. The article will also attempt to give a credible explanation for the eventual differences in dispositions to invest in such education among the various groups. In the article it is assumed that persons who invest in JAE enhance their individual marketability and that the main motivating factor for investing in JAE is precisely the individuals' expected return on the job market. The assumption is made on the basis that those who are most disposed to invest in JAE are persons who appear to have the greatest opportunities for career advancement.

Introduction

The theme of the following presentation is recruitment to JAE. This aspect of adult education is comprised of various courses, continuing education, and other forms of training that are taken in relation to one`s present or future occupation. The assumption is that JAE is comprised of training that gives competancy on the job market and that the participants take this training on their own initiative.

Education and training are strong determinants of the individual's position on the job market and their placement in the social stratification (Elstad, 1984). This means that persons who invest in JAE are preparing themselves for the competition they will be facing on the job market, and at the same time are strengthening their positions and chances in regards to obtaining a better standard of living later in life - as seen in relation to those who don't invest in JAE. To make the picture more complete we should mention the great amount of research that shows that the various social groups are unequally represented in the various areas of the educational system

(Central Bureau of statistics, 1989). According to the Adult Education Law (Lov om Voksen-opplæring, 1976), one purpose of adult education in Norway is to reduce the educational diffe-rences that are established in the public school system. Various research tells us however that adult education appears to reinforce rather than reduce these social differences (Central Bureau of statistics, 1989).

JAE has become an extensive sector and yet little research has been conducted on it (Gooderham and Lund, 1990), although there are some exceptions (Henriksen, 1984 and Rønning, 1989, for example). In addition to the fact that mapping and explaining social differences are important sociological tasks (Øyen, 1992), the aforementioned aspects of JAE should make apparent the actual need for research within this area of adult education. The goal of the article is thus, 1) to describe the different dispositions of the various social groups to invest in JAE, and 2) to give an explanation for why there are variations in the dispositions to invest in JAE among the various social groups.

Theoretical approach and some hypotheses

According to Max Weber, the explanation of any social phenomena has to start by reducing it to the individual behaviour patterns which gave rise to it, and in addition to being able to show a correlation between the empirical and the theoretical, these patterns have to be regarded as "rational" (Boudon, 1989). Given this context I will utilize theories based on the individual and presume that a main motivating factor for investing in JAE is the individual's expected returns from the training. The human capital theory suits this approach (Nordhaug, 1987). Training is regarded as a productive investment for both the individual and society, an investment that is more profitable than investing in real capital (Schultz, 1977). This means that a person's decision to invest in JAE is an instrumental one. Factors such as expected income and utility minus the expected costs of training and an eventual job change play a key role when an investment decision is made. The focus of the human capital approach on economic conditions has previously reduced its application in sociology. Instead, status attainment and cultural capital approaches have been used (Nordhaug, 1987). In the article the human capital approach will be used (according to the "new" interpretation given it by Thurow in Karabel and Halsey, 1977) to explain the acquisition of formal competence, presumed to be attained through JAE, as a link in the individuals strife towards making themselves more attractive than their competitors on the supply side of the job market. In this sense, an investment in JAE will carry with it expectations of upward

career mobility or promotion with concomitant increase in pay. It is important to note that the opportunities for strengthening one's position in the job market and, further, to attain upward mobility, depends on many factors. Besides describing the predispositions of various social groups for investing in JAE, my chosen independent variables are also presumed to indicate some of the important factors that can motivatethe individual to invest in JAE.

A persons *level of education* is supposedly a factor that to a great extent will determine an individuals expectations regarding the returns on an investment in JAE. The individuals level of formal education can be regarded as a competancy basis that for most intents and purposes will determine what opportunities he/she will have in the job market. The relationship between education and occupation has become increasingly strengthened (Knudsen, 1992), and in our times a high level of education is almost always required in order to get a job in the upper levels of the occupational hierarchy. Given this context, an individuals' competancy basis is of greater importance now than it was earlier if one is to have realistic hopes for advancement on the job market. JAE will only give a marginal increase in competancy as compared with the individuals' existing competancy basis. In addition, the attitudes of the indvidual towards the educational system and formal learning are important for their motivation for participating in JAE (Cross, 1981). I would presume that the longer the education one has from the regular school system, the more likely one will be to have had positive experiences from the learning situation as compared to those who were directed out of the system at a lower level (NOU, 1976:46). Also, different occupations offer different opportunities for upward mobility and promotion. It is expected that an investment in JAE will suffice in most instances when additional qualifications are required for advancement. Functionary jobs usually require a high level of education and often give openings for advancement later in life (Colbjørnsen, 1986). In other words, positions that give opportunities for advancement stimulate employees to participate in continued education and the level of regular education (competency basis) has an indirect effect dependent on job position. In sum, I expect that a person's disposition to invest in JAE increases in proportion to a person's level of education. This is *hypothesis 1* in the empirical analysis.

It is important to note that a person's present job or occupation (*employee rank* is likely to be of independent importance here. Workers and lower fuctionaries are offered relatively few opportunities for upward mobility (Colbjørnsen, 1986), while higher functionaries secure positions at the top of the occupational hierarchy. Thus it is the intermediate functionaries who

seem to have the greatest opportunities for upward mobility and, of all the various occupational groups, it is supposedly this group that is most inclined to invest in JAE. I would then expect that a person's disposition to invest in JAE to increase with higher employee rank, with the exception of those in the highest functionary positions. This is *hypothesis 2*.

Career opportunities are not only dependent on the level of attained education or occupational position, they are also dependent on personal factors such as gender, age, and place of residence with its accompanying occupational structure (NOU, 1976:46). In regards to the *age* variable, the human capital approach has earlier contributed to a better understanding of the lifelong effect (Nordhaug, 1987), that is to say that investing in JAE decreases with age because the expected economic returns on such an investment decrease with the fewer active years one has left on the work force. I would expect that a decrease in investments in JAE starts around the age of 50, because, despite everything else, JAE entails for the most part short courses after which the benefits can be expected to come rather quickly. At the other end of the job age scale, about 50% of the group between the ages of 16 and 24 are in the process of getting an education (Knudsen, 1992). Unemployment is also greatest for this group (Sosialt Utsyn, 1993). The unemployed are often offered participation in various educational programs that are not covered by the definition of JAE. In sum, I expect the disposition to invest in JAE to increase with age for the "youngest" group (16-27 years of age), to be greatest for the "middle-aged" group (28-49 years of age), and decrease as one gets older for the "oldest" group (50-66 years of age). This is *hypothesis 3*.

When we discuss the impact of *gender* on JAE participation, we must be aware of the previous research on this by Cross (1981) and Rønning (1989). Both found women to be more oriented towards the importance of further education in order to change jobs, while men were more oriented towards strengthening their positions in their present jobs. It is also pointed out that women are more often represented in functionary positions than men, and that the relation between education and occupation is stronger for women than it is for men (Colbjørnsen, 1986). Furthermore, men, more often than women, have jobs with opportunities for upward mobility through hard work (NOU, 1976:46); a factor that might reduce the importance of JAE for men. This implies that women probably have a greater need for formal qualifications than do men when they desire upward career mobility. Thus, my expectation is that the disposition to invest in JAE is greater for women than for men. This is *hypothesis 4*.

The last factor in this study is the individual's *place of residence*. The supply of JAE courses is usually lower in rural than in urban areas (NOU, 1976:46). Much of the effect of place of residence on JAE participation is probably due to the occupational structure in the area. The trade structure in small places often entails many persons in primary industry and small businesses in contrast to what we find in relatively large places. This of course has implications for the career possibilities in the vacinity of one's home. Furthermore, subsidies for adult education have been reduced since 1980 (Setsaas, 1986) and a more "market-oriented" offering of courses has evolved, something that probably has caused the supply of courses in rural areas to suffer. The distance to the nearest course center also affects participation in adult education, mostly because of the cost of transportation (Knudsen and Skaalvik, 1979). In sum, it seems as if the supply and demand for JAE is lesser in rural than in urban areas. *Hypothesis 5* says that I expect one's disposition to invest in JAE to be higher in urban than in rural areas.

A more thorough research project would have mapped all the direct and indirect effects of the independent variables on the dependent variable (disposition to invest in JAE). My working model doesn't contain all of these possible causal relations as my intention is to cover the most important relations (the lines between the variables). These lines depict causal relations that run from left to right.

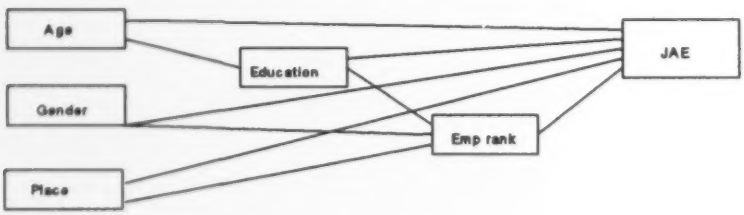


Figure 1. Working model for the influence of the independent variables on JAE.

Data, variables, and methods

My empirical results are presented on the basis of data from the Norwegian Survey of Living Conditions for the year 1990. Norwegian Social Science

Data Services (NSD) has made the data available, but it is the Central Bureau of Statistics (CBS) that has originally done the collecting and organizing of the data. Neither NSD nor CBS are responsible for the data analyses or the conclusions drawn in this study. The presented results refer to JAE participation in 1990 and the disposition to invest in JAE is regarded as the dependent variable. The chosen independent variables are, in brief, presented as follows: Gender - dichotomous variable. Age - grouped variable. Employee rank - grouped variable that is derived from CBS's standard classification of occupations according to socioeconomic status (CBS, 1984). Place of residence - grouped variable that refers to the number of inhabitants in the respondents place of residence.

Further, I have made some assumptions, especially about the individual's motivation to invest in JAE. I've utilized hypotheses testing of bivariate relations and usual analyses of bi- and trivariate cross-tables. Another analytical method would be required if the purpose was to calculate more precisely the direct and indirect effects of the independent variables on the disposition to invest in JAE. The respondent's social background (parent education and occupation, for example) is an important variable in studies of career-oriented training (Gooderham, 1987). Thus, it is probable that lack of access to information about this variable, in addition to the assumptions and "simple" methods used, will contribute to reducing the validity of the results in this study.

Empirical results

For the whole sample (3179 persons between 16-66 years of age), the disposition to invest in JAE is 14,6 %. The following bivariate tables present the tests of the hypotheses I've made. I've utilized a significance level of 0,05.

Table 1: Education-JAE

Education/JAE	Higher education 13-20 years ed.	Secondary sch. 10-12 years ed.	Primary school 6-9 years ed.	TOTAL
Participation %	25,4	15,3	7,3	14,6
TOTAL	582	1500	1016	3098

Table 1 shows, with a missing on 81 persons, that hypothesis 1 - the disposition to invest in JAE increases in proportion to one's level of education - can be confirmed.

Table 2: Employee rank -JAE

Occu-pation/ JAE	Unskilled worker	Skilled worker	Lower functio-nary	ntermed. functionary	Higher functionary	TOTAL
Partic. %	8,5	14,5	17,0	25,2	22,3	19,0
TOTAL	340	242	370	725	269	1946

Table 2 shows, with a missing on 1223 persons, that hypothesis 2 - the disposition to invest in JAE increases with higher employee rank, except for higher functionaries - can be confirmed. My focus here is only on workers and functionaries, because these groups clearly are most disposed to invest in JAE. Farmers, self-employed, students, and pensioners (with an average disposition to invest in JAE at a low 7,6 %) are groups not included in this table, resulting in the high missing.

Table 3: Age-JAE

Age/JAE	16-21	22-27	28-38	39-49	50-66	Total
Partic. %	8,2	15,6	18,4	18,5	9,8	14,6
TOTAL	437	443	800	763	736	3179

Table 3 shows, without missing, that hypothesis 3 - the disposition to invest in JAE increases with age for the youngest group (16-29 years of age), is highest for the group between 28-49 years of age, and decreases with increasing age for persons over 50 - can be confirmed.

Table 4: Gender-JAE

Gender/JAE	Women	Men	Total
Participation %	15,5	13,8	14,6
Total	1607	1572	3179

Table 4 shows, without missing, that hypothesis 4 - the disposition to invest in JAE is greater for women than for men - cannot be confirmed.

Table 5: Place of residence-JAE

Place/JAE	Rural	Urban	Total
Partic. %	12,5	16,7	15,0
Total	1199	1900	3099

Table 5 shows, with a missing on 80 persons, that hypothesis 5 - the disposition to invest in JAE is higher in urban than in rural areas - can be confirmed. Rural denotes places with fewer than 2000 inhabitants, while urban denotes places with more than 2000 inhabitants.

Further, by weighing the independent variables against each other two by two, I found the following correlations over 10 percent. Gender, with women as the high value, is positively correlated (0,14) with employee rank. This implies that of those who have jobs, women on the average have higher rank than men among workers and functionaries. Age is negatively correlated with education (-0,18), indicating that on the average older persons have a lower level of education than younger persons. Place of residence is positively correlated with both education (0,20) and employee rank (0,23), with urban areas as the high value. This indicates that the occupational structure varies with the size of the place of residency. The strongest correlation is of course the one between education and employee rank (0,38). These correlations are of such importance that it is necessary to follow them up with a *multivariate analysis.*

Table 6 : Education-employee rank-JAE

Emp. rank/ edu-cation	Unskilled workers	Skilled workers	Lower functionary	Intermed. functionary	Higher functionary	TOTAL
pri-mary sc.	5,5 (165)	2,7 (74)	13,8 (123)	18,9 (106)	(22)	10,6 (490)
secon-dary	11,5 (166)	19,7 (152)	16,6 (217)	22,5 (334)	19,1 (68)	18,5 (937)
higher edu.	- (5)	- (11)	- (24)	31,5 (267)	24,0 (175)	28,4 (482)
TOTAL	8,3 (336)	14,8 (237)	16,7 (364)	25,3 (707)	22,2 (265)	23,6 (1909)

Table 6 shows the level of education and the employee rank effects on the disposition to invest in JAE. Onission of rate in the table indicate that there are too few persons in the particular categories to say anything certain about the disposition rate. To calculate the indirect and direct effects from education and employee rank on the disposition to invest in JAE I've put workers and lower functionaries in one group, while intermediate and higher functionaries are in the other "occupational group". I've also grouped persons with 11 or less years of attained education in one group, while those with 12 years or more (minimum attained secondary school) are in the other "educational group".

Table 7: Education-occupation-JAE

Education	12-20 years	12-20 years	7-11 years	7-11 years	Total
Occup/JAE	intermid. + high. func (tionary)	low func + worker	intermid + func (tionary)	low func + worker	-
Partic. %	26,3	20,0	21,0	11,0	18,9
Total	643	230	329	707	1909

From Table 7 we can calculate the direct effect of education on the disposition to invest in JAE to be 7,1 %, the indirect effect through occupation to be 3,3 %, and together the bivariate effect is 10, 4 %. The corresponding direct effect of occupation is 8,3 %, the indirect effect (caused by education) is 3,0 %, and together the bivariate effect is 11,3 %. These results strenghten my hypothesis that both education and employee rank (occupation) have strong independent effects on the disposition to invest in JAE, but at the same these two variables also seem to have indirect effects on each other. I've mentioned the importance of age both in relation to the disposition for investing in JAE and level of education. In the following table we'll be looking at these factors. Persons under 49 years of age are combined into one group while persons from 50-66 years of age comprise the other group. For education I'll use the same groupings as in table 7.

Table 8: Age - education - JAE

Age	50-66	50-66	16-49	16-49	Total
Educ/JAE	12-20	7-11	12-20	7-11	-
Partic. %	21,7	11,8	16,1	7,8	14,6
Total	1023	1352	155	568	3098

Table 8 shows the effects of age and education on the disposition to invest in JAE. Calculations of the different effects in this table will show that the direct effect of age is 4,6 %, the indirect effect of education is 2,0 %, and together the bivariate effect is 6,6 %. The correlating direct effect of education is 9,5 %, the indirect effect (caused by age) is 0,9 %, and together the bivariate effect is 10,4 %. Thus the effect of age seems to be the major cause of the relatively low disposition to invest in JAE among persons over 50 years of age. Further, I've argued for the effect of gender in relation to employee rank (occupational position). The following table illustrates the importance of gender on the disposition to invest in JAE, controlled for employee rank.

Table 9: Gender-Employee rank-JAE

Gend/ Emp.	Men Unsk work	Men Skill. work	Men Low func.	Men Inter func.	Men High func.	Wom Unsk work	Wom Skill. work	Wom Low func.	Wom Inter func.	Wom High func.	Total
Part.	9,4	14,4	-	19,6	20,1	6,3	-	17,7	30,4	26,3	19,0
Total	245	215	64	347	174	95	27	306	378	95	1946

Table 9 shows, with a missing on 1223, the effects of gender and employee rank on the disposition to invest in JAE. In this table we see that women have a higher dispositon to invest in JAE than men; a result of the primary focus on persons in worker and functionary postitions. The calculations of the the different effects of the two independent variables are based on the same occupational groups as in table 7. The calculations for gender (with women as the high value) gives a direct effect of 6,5 %, an indirect effect of occupation/employee rank of 0,2 %, and together the biavariate effect on the disposition to invest in JAE is 6,7 %. Employee rank has a direct effect of 11,0 %, an indirect effect (caused by gender) of 1,0 %, and together the biavariate effect is 12,0 %. It appears that of persons with worker or functionary status, it is the women who invest most in JAE. It is also apparent that the women who invest in JAE come from higher positions on the "work hierarchy" than the men.

I have also argued for the effect of place of residence on the dispostion to invest in JAE. I don't show any table here as it would have given little of new information. Instead, I will refer to the calculations that are most important. Almost half of the bivariate effect (4,5 %) on the dispostion to invest in JAE calculated from place of residence is an indirect effect of employee rank (the occupational structrure). This means that place of residence in itself has a very weak effect on JAE participation since a great

deal of the effect is caused by the occupational structure. Furthermore, it is possible that controlling for correlating education will further weaken the direct effect of residence on the disposition to invest in JAE.

Discussion

The empirical results showed that four of my bivariate hypotheses could be confirmed, while the multivariate analyses gave a better picture of the causal relations. Level of education and employee rank seem to have strong independent effects on the disposition to invest in JAE, but the results also showed that education and employee rank weaken each others effects on the disposition to invest in JAE because of the correlation between these two variables. In the case of education I have pointed out that this variable correlates strongly with employee rank, and that JAE probably only gives a marginal increase in competence as an addition to one's level of regular education (competency basis). Further, an increased level of education can result in raised expectations about upward career mobility and force investment in JAE in order to realize career wishes. Thus, it seems like the utility of an investment in JAE increases in correlation to the level of education. An additional explanation is that attitudes toward formal learning are important for the motivation to invest in JAE (Cross, 1981). Positive attitudes rise with increasing level of education (NOU, 1976) because relatively high education indicates good experiences from learning situations. Although a good attitude is important when investing in further training, it seems only to be of intermediate status (Gooderham, 1993). A probable cause for this is the relatively high level of previous education and the corresponding opportunities for upward mobility.

Further, the data show that people with other than worker and functionary positions very seldomly invest in JAE, that employee rank has a strong direct effect on one's disposition to invest in JAE, and that the disposition to invest in JAE rises with higher employee rank. The explanation can be that the opportunities for upward mobility are differently distributed among the different occupations. People who are not in worker or functionary positions have few of these opportunities, while the opportunities for career advancement probably increase as employee rank gets higher - possibly with the exception of higher functionaries.

Furthermore, the differences in dispositions to invest in JAE between the various occupational groups may be greater than the assumed opportunities for career advancement can explain; especially the big difference between skilled and unskilled workers is remarkable. I will therefore introduce a well

known supplementing theory, namely, that the work situation gives rise to characteristic attitudes and subcultures (Gooderham, 1993). Persons in relatively heterogenous environments, with much vertical contact among the work force, are inclined to form open and positive attitudes towards training and career. Especially lower functionaries - and to an extent skilled workers - seem to fall into this category. Further, it's assumed that unskilled workers are more often in homogenous environments with greater opportunities for creating subcultures like the one in "Arbeiderkollektivet" (Lysgaard, 1961). Such subcultures can increase the possibility that negative attitudes toward formal learning are expressed and reinforced because the members have had bad or short experiences with the educational system. If someone participates in courses and desires individual career advancement they might be met with negative sanctions from their fellow workers. Thus, this can contribute to explaining the lower disposition to invest in JAE among unskilled workers in relation to skilled workers. We have also seen that the higher functionaries have a relatively high disposition for investing in JAE, seen in relation to the assumedly fewer opportunities for upward mobility for this group. It is possible that the classification of occupations into five employee categories is too rough, since there exists greater opportunities for upward mobility in the highest rank than I have assumed. An additional explanation is that it can be of more importance to upgrade oneself with further training for persons who are in such "high positions" because of the complexity of their jobs (Nordhaug, 1993). This can also be part of an individual strategy for maintaining the distance to the "upcoming" people in lower positions.

The respondent's age also seems to have a great impact on the disposition to invest in JAE, after controlling for level of education. The effect of age seems to be of more importance than the effect of lower level of education among the elderly when we focus on the differences in dispositions to invest in JAE between persons over and under 50 years of age. The decline in JAE investment after 50 years of age might be explained by lower expectations for its benefits because of the relatively few years left in the active work force. In addition, it is possible that older persons believe less in their own capacity for learning (Gooderham and Hines, 1993) and that firms are possibly restrictive in hiring older persons. In sum, this implies that the opportunities for career advancement decrease with higher age for persons over 50, which can cause the decline in investment in JAE for this group. Further, the data also show us that persons between 16 and 27 years of age have a lower disposition to invest in JAE in relation to persons between 28 and 49. This might partially be caused by the fact that 50 % of the group between 16-24 years of age are full time students (Knudsen, 1992) and that the unemployment rate is highest among persons under 30 years of age

(Central Bureu of Statistics, 1989). In regards to this last point it is important to point out that the unemployed often get free training through courses arranged by the government, job market courses, that fall outside the definition of JAE.

Further, the data show that when we focus on workers and functionaries, we find women to have a higher disposition to invest in JAE than men. Women's investment in JAE seems to be more dependent on high position in the occupational hierarchy than men's. Table 9 tells us that men are more often in "top positions" (skilled workers and higher functionaries) than women, while women appear to be overly represented in "lower positions" (unskilled workers and lower or intermediate functionaries). In this respect, men seem to have greater opportunities for attaining upward career mobility than women without having to invest as much in JAE as women do. Thus, the explanation seems to be that women have a greater need for formal qualifications than men (Colbjørnsen, 1986) when they wish to change jobs. Table 9 also shows that women appear to be in heterogenous environments more often than men because of their over representation among lower and intermediate functionaries. This might create wishes for career advancement for many women in addition to explaining the stronger positive attitudes to formal learning among women that previous research has pointed out (Rinne and Kivinen, 1993).

Place of residence also seems to have an impact on the disposition to invest in JAE, but this impact is partly due to the different occupational structures - and maybe educational structures, in rural and urban areas. Thus, there seems to be small differences in the disposition to invest in JAE caused directly by place of residence, and it looks as if people in rural areas are highly motivated for investing in their own human capital and conquer eventual barriers of distance and other factors that might hinder their investment in JAE.

Conclusion

We have seen that a considerable number of people invest in JAE and that a major motivation for investing in such training seems to lie in the individual desire to strengthen one's position in the job market. The empirical results have shown that JAE, in general, recruits persons who can utilize increased qualifications to attain upward mobility. It seems that people with the greatest opportunities for career advancement are overly represented in JAE, indicating a "rational" behaviour pattern. A majority of the people who invest in JAE already have opportunities for a good career,

due to higher education and/or occupation. The results imply that JAE contributes to reinforce the social differences that are established in the educational system. Previous research has pointed out that this pattern of recruitment is an international phenomena and it seems as if courses of this kind, where people participate on their own initiative, will always recruit a majority of people from relatively high positions in the social stratification (Setsaas, 1986).

The disposition to invest in JAE also seems to decrease after 50 years of age which is consistent with previous research on participation in employer-funded training (Knudsen and Skaalvik, 1979). Further, it seems as if the disposition of women to invest in JAE is more dependent on high position in the occupational structure than it is for men, possibly as a result of women's greater need for formal qualifications in the job market (Colbjørnsen, 1986), making the utility of JAE greatest for women. Furthermore, other factors than those I've regarded as important here seem to affect the dispositions of the various social groups for investing in JAE, this is especially true for the "place of residence" category. The small differences between urban and rural areas can indicate that "other factors" than those I've discussed can affect the investment in JAE.

Finally, I would like to point out the need for further sociological research in the field of adult education. Other methods, the impact of "other factors", and the actual benefits for the participants in JAE are some of the important questions. In addition, it would be interesting to collect data that says something about type of training, duration of JAE courses, etc.

References

Boudon, R. (1989). *The logic of individual action*.

Central Bureu of Statistics (1984). *Standard klassifisering av sosioøkonomisk status*. Oslo: Kongsvinger.

Central Bureu of Statistics (1989). *Sosialt Utsyn 1989*. Oslo: Kongsvinger.

Central Bureu of Statistics (1993). *Sosialt Utsyn 1993*. Oslo: Kongsvinger

Colbjørnsen, T. (1986). *Klassesamfunnet på Hell*. Oslo: Universitetsforlaget.

Cross, K. P. (1981). *Adults as learners*. San Francisco/Jossey-Bass.

Elstad, J. T. (1984). *Levekår, sammenheng og helhet*. INAS Rapport 1984:1.

Gooderham, P. (1987). Reference group theory and Adult Education. In *Adult Education Quarterly* vol 37 nr 3 1987.

Gooderham, P. (1993). A conceptual framework..... I *Lifelong Education* vol 12 nr 1 1993.

Gooderham, P. and Hines, K. (1993). *Trends in Employer funded Training* ... Working Paper, Departement of Sociology, University of Trondheim.

Gooderham, P. and Lund, J. (1990). *Voksenopplæring uten styring?* Trondheim: Norsk Voksenpedagogisk Insititutt.

Henriksen, B. (1984). *Kvinner som Opplæringsreserve?* Hovedfagsoppgave i sosiologi. Universitetet i Trondheim.

Knudsen, K. (1992). Utdanning, in Øyen, E. (ed). *Sosiologi og Ulikhet*. Oslo: Universitetsforlaget.

Knudsen, K. and Skaalvik, E. (1989). *Deltakelse i Voksenopplæring*. Trondheim: Norsk voksenpedagogisk institutt.

Lysgaard, S. (1961). *Arbeiderkollektivet*. Oslo: Universitetsforlaget.

Nordhaug, O. (1987). Outcomes from Adult Education. In *Comparative Education* vol 23 nr 1 1987.

Nordhaug, O. (1993). Livslang Læring, in Haugerud & Kvam (eds): *Livslang Læring*. Trondheim: Norsk voksenpedagogisk institutt.

NOU (1976). *Utdanning og Ulikhet*. Norges Offentlige Utredninger 1976:46.

Rinne and Kivinen (1993). Adult Education, the second change: facts and fiction. In *Scandinavian Journal of Educational Research* vol 37 nr 2 1993.

Rønning, W. (1989). *EDB-opplæring og Kompetanse*. Trondheim: Norsk voksenpedagogisk institutt.

Sand, R. (1993). *Hvem investerer i opplæring?* Intermediate subject, Departement of sociology, University of Trondheim.

Schultz, T. (1977). Invesment in Human Capital, in Karabel & Halsey: *Power and Ideology of Education*. New York: Oxford University Press.

Setsaas, R. (1986). Voksenopplæring i fritiden", in Lund J. & Setsaas R. (eds): *Voksenopplæring i søkelyset*. Trondheim: Norsk voksenpedagogisk institutt.

Thurow, L. (1977). Education and Equality. In Karabel J. & Halsey A.H., *Power and Ideolgy in Education*. New York: Oxford University Press.

Øyen, E. (1992). *Sosiologi og Ulikhet*. Oslo: Universitetsforlaget.

82

Learning at the Work-place
An Industry in Change

Per-Olof Thång

Associate Professor, Dept. of Education and Education Research
University of Göteborg

Competence development and learning through working life experience have become honourary terms in this decade's working life focussed education research. The State and State agencies have given industrial companies access to fiscal resources to the ends of procuring possible avenues of competence development for their employees. Perhaps what is meant to become advanced by this are changed working conditions, which in their turn will enhance opportunities for new learning and thereby create a better working platform for enhanced productivity.

This article discusses the learning possibilities for production industry operatives on the basis of findings from an ongoing research project[1]. The participating industries do not belong to the most knowledge intensive fields of Swedish industry.

One of the central questions addressed by the project has to do with how learning takes place and which factors in a non-knowledge intensive production support or obstruct learning. A debate has raged for some time now regarding how qualification demands within production industry are increasing, unchanging or in fact decreasing, but the outcomes of these

---

[1] The LUNO (learning and education for industrial transition) project. The aims of the project are to describe and analyze the need of competence development among ancillary labour in the Gothenburg region. The project comprises both research and development phases. The empirical studies are concentrated on a group of ancillary workers whose production tasks run the risk of being more or less radically changed on the basis of technology, amended production organization and so forth.

discussions are somewhat unclear. There are some signs of increase in qualification demands, but at the same time we have been able to detect the exact opposite in some branches of Swedish industry. During the 1980's a polarization with respect to qualification demands were noted in some industrial branches (Thång, 1992). Other discoveries (Lennerlöf, 1993) indicated not all that surprisingly that material and technical systems change more rapidly than social systems; i.e. the organization and employee competence.

In the 1990's dramatic changes seem to be considered as taking place within both industrial and other types of organization. On the basis of Nadler et al (1992), Mattsson (1993) writes: "Global economy and technology create more equal competitors providing for a rapid product development and dissemination of technology. Globalization exposes in-effective organizations and over-capacity. On the social side customer and owner demands are having greater effects. Political support and industrial economic control can dramatically effect existing conditions. The dynamic changes in the labour force are also an important factor to take account of" (p. 4).

The concept of "Organizational Learning" lies close to hand here. This concept, at a general level, points to the ability of an organization to continually learn to learn; i.e. to an organization characterized by ongoing development and continual acclimatization to changing conditions. The greater and greater attention paid to this concept; both as a concept and as a phenomenon, comes as a direct recoil to the increasing pressure to change which modern industrial organizations are exposed to. In tact with the change in focus from individual learning to organizational learning, issues of education and competence are given an increasingly more front-seated position and role in determining the success or failure of an organization. In reference to Swieringa and Wierdsma (1992), Mattsson (op cit) writes that: "An enhanced level of education and competence within the labour force gives rise to a partially uncontrolable internal dynamics which provides invaluable knowledge to the organization. Individual and collective competence are continually being put to test, which means that they must be continually further developed and deepened" (p. 12).

A Company in Transition

The following discussion concerns a medium large industrial company which is part of a larger industrial concern and which produces, amongst other items, acoustic products for the car manufacturing industry. In some senses

this company has changed dramatically over the past 3 or 4 years. The work-environment has improved enormously since 1988, the time of purchase buy the new owners. Previously the poor work-environment had given the company a bad reputation.

The company has invested heavily in new equipment during the past five years. Through automation, the introduction of industrial robotics and computer technology, the labour force at some production stations has been reduced from 8 operatives to 1. The number of employees has fallen dramatically at the same time as production has risen markedly. The previous top down vertical mode of control within the organization has been replaced by a more horizontal form of control embodied in a participant oriented communication structure.

In 1991 and 1992 the company wrestled with profitability. Orders were unstable and there were continual disruptions in production. An element of crisis thinking developed with a number of dismissals as a result. The spring of 1993 however, saw the dawn of a more positive trend. This was brought about probably by the effective devaluation of the Swedish Crown, which followed the floating of the currency in November 1992, and undergirded a rise in orders. The more positive development has also been influenced by other factors though. The "Elimination of Waste" is one of these.

"Elimination of Waste"

The previous emphatic devaluation of the Swedish Crown in the early 1980's did not give rise to any significant efforts to improve and ratio-nalize manufacturing industry. The situation this time round seems to be rather different.

In the spring of 1993, in the particular company in focus here, an internal project was started which set out to systematically hunt down possible ways to reduce costs. "Elimination of Waste" (i.e. lean production), as the project came to be known in the image of similar efforts in an American sister corporation, quickly became an established concept amongst production personnel. The production manager moved his office down into the production hall in order to be at hand and establish direct contact with production and production personnel. Attention was directed at actual production and production conditions. Information about the general situation of the company, incoming orders week by week, customer relations and issues of quality were intensified.

Operatives were engaged in the elimination of waste through so called "improvement tasks". The philosophy behind this was the presentation of responsibility for independently evaluating and carrying through different improvement schemes connected to production to selected operatives. Two operatives were selected for each scheme, one from the day-shift and one from the night-shift. Each scheme was formulated under five headings: (a) responsibility, (b) the scheme content, (c) aims, (d) time and (e) conditions. In order to illustrate such schemes I include here an example of one of them.

"Responsibility": P.F. and F.O.

"Scheme Content": To develop an optimal method so that the standing time of the Keifel Machines can be halved. By standing time is meant the time between the the last box from a batch has been banded to the time that the first item in the following batch is boxed. The methods should be documented. Other operatives should be trained.

"Aims": According to our basic data the standing is 72 minutes. If the standing time is to be halved the aim is 36 minutes.

"Time": Results will be presented at the group meeting in February.

"Conditions": Adjustments should be made by two persons, preferably Keifel Drivers with the help of the foreman. No technical adjustments are to be made to the machines, only small adjustments made by the operatives themselves or with the help of maintainers from the maintain room (max 10 hours). All standing times for the Keifel Machines are to be presented openly from today onwards. P.F. and F.O. may change shifts occasionally to work together on the project.

Good Luck!

The most common kinds of improvement concerned the following kinds of activities.

- Reducing refuse from different machines and increasing the recycling of so called refuse material.

- Trimming equipment. For instance tuning machinery to improve material flow and product quality.

- Reducing standing times for refitting different machines.

- Testing different materials such as slip fluid for different matted surfaces.

BEST COPY AVAILABLE

- The development of more complete control instructions for different machines.

- Improvements to the work-environment.

Characteristic for the different scheme content descriptions were first of all their quite concrete and specific formulation, secondly that conditions were usually described in terms of the resources which were available, and thirdly that a time was always pre-specified for when suggested changes were to be presented. The work was in general then, characterized by a certain lack of pre-planning and structure. Indeed it could be described as almost ad hoc. The background was of course the quick attainment of concrete improvements. Nor were the schemes reported in written form by the responsible operatives, but were presented verbally. The indications are that the schemes were not regarded as comprising formal learning activity.

Through these special schemes, management began eventually to formulate plans for competence development. During successive improvement schemes in 1993, a clear interest for and desire to take part in developments and productivity improvements appeared amongst operatives. The management began to see ever more clearly that formal and informal learning needwise become a significant part of future work activities.

The improvement schemes can be likened to learning projects as defined and described by Allen Tough (1977) as: "A highly deliberate effort to gain and retain certain definite knowledge and skill, or to change in some other way". The continual strategy among operatives as they solved their improvement scheme related tasks was highly systematic. They carefully observed and registered a chain of events for analysis and improvement.

Another clear association to the improvement schemes is provided by the Japanese concept of quality circle (QC). The specific focus of QC is problem solving. With management help work related problems are identified, analyzed and solved. Problem solving in QC can be described as a process comprising seven stages according to Saunders and LaRoe (in Shuttleworth, 1993):

1. A problem is identified.
2. Causes for the problem are determined.
3. The most important causes are identified and analyzed.
4. A solution is chosen.
5. A plan of action is developed.

6. A presentation is made to management to obtain support for recommendations.
7. If the plan is accepted by management the circle monitors implementation and undertakes to see if the problem is resolved or alleviated.

In other respects the similarities with QC should not be over-reached. Eriksson and Holmer (1991) write: Furthermore, education which aims to provide ancillary workers with greater control over their work situation meet different problems than for instance a QC which perhaps at first hand should contribute to the strength and effectivity of a given management" (p. 186).

Need for Knowledge

A large part of the information dealt with fundamental relationships between production relations and the economy. The cost of raw materials and knowledge about production conditions were other themes. All of these things together were meant to provide operatives with the kind of elementary knowledge they needed in order to make independent decisions. One observation which management had made early on was that operatives seemed rarely able to make independent decisions in concrete work situations. The conclusion they drew was that a lack of elementary knowledge was a contributing factor. Cost awareness and knowledge about production relations were seen as two central areas. Operatives had some difficulty drawing economic calculations into their thinking. The relations between different production and productivity factor relationships are too complex epithets of knowledge for operatives to develop a working relationship with and for on the basis of their day to day labour based activities. It became necessary therefore to educate them on these matters in some other kind of setting.

In a sense a kind of "syllabus" took form through which personnel were to develop awareness about simple but fundamental relations between manufacturing and the economy. The term syllabus is a relevant concept to use here in the sense that management were able to pose controlling questions to groups and individuals.

The need for knowledge became increasingly obvious during spring 1993. This was particularly so regarding fundamental knowledge of materials, machines and production calculations.

In part company developments here are in line with the industrial production strategy termed flexible specialization. Flexible specialization "implies a radical break with the principles of mass production in that it lies closer to models of craft production. Flexible specialization has been described as a strategy for permanent innovation; an acclimatization to continual change rather than an attempt to control it. Furthermore, it is developed around flexible equipment - such as multi-operation machines - and tradesmen rather than labourers" (Eriksson and Holmer, 1991, p. 16). Even though the company produced a restricted assortment of acoustic products, production was continually re-assessed in accordance with order-flow and maintained an on-going innovative tendency. Short-series production was employed for immediate delivery to the customer. This form of orders steered "just in time" production calls forth a need for relative decentralized control of the organization, the growth of partially independent groups of workers and a greater measure of integration between different departments and functions.

Eriksson and Holmer (1987) discuss the differences between traditional mass-production and short-series production. As they see it, mass-production implies the "freezing of creativity" and the shelving of continual product development. Proto-typical production, single production and short-series production on the other hand invites cooperation with customers and thereto creativity. The product becomes "problematic" in the sense that it is a focus of discussions between producer and consumer, giving rise to opportunities for learning through labour and work variation.

The change in direction toward enhanced customer control, higher quality and so forth, worked toward by the company, demands, to be successful, more developed views of personnel training and the competence development of production workers. Successful production is dependent on the engagement of workers, worker independence, knowledge and educative potential.

Three key concepts were introduced to lead the development of enhanced productivity. These were specifically: "Just in time", TQM (Total Quality Management) and Kaizen (the continual implementation of small improvements). The selection of key concepts was a conscious one. Ideas, general plans and philosophies cannot change reality unless there are also strategies of implementation and the stamina to see these through. Improvement schemes were one strand in this process of implementation.

Views of competence, learning and education among production personnel

Views on education and learning amongst industrial workers with a shorter than average formal education have been the object of previous studies (Larsson et al 1986, Alexandarsson and Thång 1987, Thång 1989, Thång 1990). One observation made in these studies was that these people held different views on education function, and specifically on when education is meaningful or relevant. The results here were summarized in terms of broad and narrow (or instrumental) views of education. The broad view related to views of education as an event leading to changes in the learner as a person, i.e. as leading to changes in habits and life-style. The narrow, or instrumental view, saw education as meaningful only in relation to profession work task.

The possibilities for competence development and career within working life for many industrial workers who have a shorter than average formal education, or are educationally inexperienced, is somewhat limited. However, more and more of this category of worker are being increasingly made aware of the significance of education for more qualified work. Previous studies (Larsson et al, op. cit. and Thång op. cit.) have shown that there exists a large group of latent, study motivated individuals within this category.

In the present investigation we have obtained a good picture of how production workers in general relate to competence, learning and education, through observations, interviews and questionnaire studies.

In order to better understand the thoughts and appreciation operatives have regarding competence and learning, it must be borne in mind that the introduction given to beginners in the acoustics department - the actual production department in focus - is very short: often not more than one or two days. Thereafter operatives are expected to more or less get by themselves. One of our interviewees said: "It depends on your willingness to learn the work. Its not hard. Any normal person can learn it". Just specifically this willingness to learn to get by oneself, not to need to ask others, is a great driving force for many of them.

The motives for wanting to learn more about the work were partly so that simple problems and disruptions in production could be sorted out directly and partly so that the work could be experienced more meaningfully. Most operatives described how bad it felt to be helpless in front of more or less simple problems. Many of them even took the company's perspective and

implied that having to stand and wait for help with simple problems was very ineffective in productivity terms. A more personal standpoint on learning the work concerned a desire to understand the production process one is a part of. "It feels very bad if like an electrician comes along to mend the machine and you don't know anything" was a comment given by one operative. Another said: "You just want to know what you are doing." The fundamental human desire to understand strides forth as a prime motive for learning and competence development.

> "Yeah, you know I'm pretty bad with mechanical things. You feel dead proud if you can fix small things yourself ...and the computer, I'm not much cop with that either. You need proper training for it. We just put in the numbers."

The questionnaire survey at the acoustic department showed that less than 91% of the 44 operatives felt they would be able to do a better job with training for the specific items which related to their specific labour related tasks. For most of them it was a question of knowledge about the machinery: "You need more knowledge to understand the problems that happen". Also: "Proper knowledge is necessary but we don't have it. None of us have had proper training for these machines". 80% of the operatives said they would prefer work which placed greater demands on them, and most of them indicated that they felt greater job satisfaction in conjunction with problem solving and related such types of work activity. "Yeah, course. You get more of an inner sense of satisfaction then." 80% would also, if they had the choice, who would like a broader orientation education within the company. Particularly at issue here was knowledge relating to the data-technology, the machines, quality control, production technology and materials.

Closing Comments

This article reviews a small part of the findings from a more substantial research project which was completed in spring 1994. Amongst other things the results show that there is a fairly broad desire for education and learning amongst production workers. This has less to do with education in general though and is rather more specifically concerned with work related learning concerning job tasks and site of production. The named improvement schemes have also activated a proportion of employees on this front. The question raised in an article by van Onna (1992), "Why should learning on the job be considered as an essential part of future oriented policy for skill

formation in work organizations, and what are the means by which this can be encouraged?" have been given a partial reply in the study.

The desire to take a more active part in company activities amongst the operatives grew during spring 1993, partly as a result of the improvement schemes then introduced. This is in accordance with Emery (1989). As he indicated, research has clearly demonstrated that employees become more actively engaged in fulfilling company goals and improving productivity if and when they are given a genuine opportunity to influence the formation of their own work related activities. Emery's point of departure is in the democratization of production and is therefore somewhat different to our study. In Emery's terms democratization leads to engagement and multi-skilling, and thereafter to enhanced productivity and better product quality. This study takes almost the opposite line. Productivity and quality were in the foreground from the start, without any sideward glances at greater worker participation or greater work-place democracy. A reflection that can however be made is that the working procedures which have been adopted in order to chase up better quality and productivity, have involved production workers making an active commitment to, developing a greater engagement in, and therefore also probably having a greater influence over, the jobs they do. Democratization is not then the point of departure. It may however be an effect.

References

Alexandersson, C. & Thång, P. O. "Förändras människan av utbildning?". En grupp verkstadsarbetares uppfattning av effekter av utbildning. *Rapport nr 1987:06, Institutionen för pedagogik, Göteborgs universitet*. 1987. ["Are People Changed by Education": A group of shop floor worker's appreciations of education effects.]

Argyris, C. *On Organizational Learning*. Cambridge: Blackwell Business. 1992.

Emery, F. The light On the Hill, 88 - skill formation or democratisation of work. In Emery, M. (Ed). *Participative Design for Participative Democracy*. Centre for Continuing Education, The Australian National University, 1989.

Eriksson, K. & Holmer J. Ökad kundorderstyrning. *Centrum för arbetslivsutveckling. Högskolan i Halmstad 1987*. [Increased Customer Order Control.]

Eriksson, K. & Holmer J. Studiecirklar som stöd för förändring av arbetslivet. *Rapport 1991:09. Institutionen för pedagogik, Göteborgs universitet.* [Study Circle Activity in Support of Work Development.]

Mattsson, P. *Organisationslärande - en teoretisk och empirisk studie våren 1993*. Seminariet om miljöpedagogik och kunskapsbildning, rapport nr 19. Pedagogiska institutionen, Stockholms universitet. [Organization Learning: a theoretical and empirical study Spring 1993.]

Larsson, S. Alexandersson, C., Helmstad, G. & Thång, P. O. *Arbetsupplevelse och utbildningssyn hos icke-facklärda*. Göteborg: Acta Universitatis Gothoburgensis. 1986. [The Experience of Work and Education amongst non-Tradesmen.]

Lennerlöf, L. (red). *Människor, Datateknik, Arbetsliv*. Stockholm: Publica, 1993. [People, Data-technology and Working-life.]

Nadler, D. A., Gerstein, M. S., Shawn, R. B. & Associates. Organizational Architecture. Designs for Changing Organizations. San Fransico: Joss-Bass Publishers. 1992. In Mattson, P. Organisationslärande - en teoretisk och empirisk studie våren 1993. *Seminariet om miljöpedagogik och kunskapsbildning, rapport nr 19. Pedagogiska institutionen, Stockholms universitet.*

van Onna, B. Informal learning on the job. In Tuijnman, A. & van der Kamp, M. *Learning Across the Lifespan. Theories, Research, Policies.* Pergamon Press 1992.

Sanders, P. & LaRoe, M. Quality Circles for Schools. Talahassee, FL. 1983. In Shuttleworth, D. E. *Enterprise Learning in Action. Education and economic renewal for the twenty-first century.* Routledge. 1993.

Swiering, J. & Wierdsma. A. Becoming a Learning Organiszation. Beyond the Learning Curve. Wokingham: Addison-Wesley Publishers. In Mattson, P. Organisationslärande - en teoretisk och empirisk studie våren 1993. *Seminariet om miljöpedagogik och kunskapsbildning, rapport nr 19. Pedagogiska institutionen, Stockholms universitet.*

Tough, A. Major Learnings Efforts: recent research and future directions. *Adult Education 28 (4) Summer, 1977.*

Thång, P. O. *Att arbeta inom teko. En arbetspsykologisk studie.* Institutionen för pedagogik, Göteborgs universitet. Stencil. 1989. [Working in Textiles: A work-psychology study.]

Thång, P. O. Kompetenceutveckling och karriäruppfattning bland utbildningsovana inom verkstads- och tekoindustri. I Studiesteg för vuxna. Kollegiet för vuxenutbildning, 1990:03. Institutionen för pedagogik, Göteborgs universitet. 1990. [Competence Development and Career Appreciation amongst Educationally In-experienced Shop-floor and Textile Workers.]

Thång, P. O. Education and Learning for Adults with Short Formal Education. In Working Life, Learning and Adult Education. Collegium for Adult Education and Learning in Working Life. *Department of Education and Educational Research, University of Göteborg.* 1992.

The Educational Needs and Demands of Danish Workers as reflected in the Curricula of the Act on Adult Educational Grants (the VUS)

Søren Ehlers

Research Centre of Adult Education
The Royal Danish School of Educational Studies

Abstract

The article discusses the choices of learners in due to the subjects and themes in the curriculum and in due to the ways of organizing the courses. The Danish Parliament introduced in the year of 1989 an act for grant to early school leavers (the VUS). The VUS gives the employed workers an economic compensation for the loss of income in the hours of education, and a rising amount of Danish workers have used the opportunities. The act of the VUS means too that the trades and industries indirectly gets subsidies, and one of the consequences of the VUS is, that some big trades and industries has started plans for permanent education of all workers.

There are very few official demands in the curriculum of the VUS. The guidance of the Ministry of Education recommends the development to "tailored" courses for groups of learners coming from the same place of work, and the Ministry prompts the institutions of education to co-operate about new courses. The guidance lies down that the learners themselves has the right to choose the kind of curriculum that is correct to their wants, needs and qualifications.

The survey shows that the private non-formal institutions of the "Folkeoplysning" (the AOF) carries out more courses than the formal County Adult Education Centres (the AVU). As expected the basic subjects as Danish and Mathematics plays their part but the learners of the AOF has themes of psychology and civics at the top of their line. Another difference is that the learners of the AOF seems to prefer adult education arranged as themes not as subjects.

1.0 Introduction

In spite of the very large investments in education "the Act of Sct. Matthew" still plays its part: Those who have some education gets more education and those who have little education gets no more education.

The act of grants to early school leavers (VUS) is an attempt to fix this false position. The target group are those approximately 900.000 adults between 25 and 60 years who all are employed but educated or trained in a short way.

1.1 Background

The act of the VUS is one of the very few initiatives in the Danish policy of adult education which is a true success. Due to the subsidies of the VUS which is an economical compensation for the loss of income in the hours of education a rising amount of workers have been educated: 2.000 in the year of 1990, 5.000 in 1991, 8.200 in 1992 and probably 15.000 in 1993.

In Denmark we see the field of adult education as divided into three sectors: 1) The vocational training, 2) the formal adult education (the County Adult Education Centres) and 3) the non formal adult education (the Folkeoplysning). The last two sectors are different in many ways. The learners of the County Adult Education Centres are free to choose the subjects they want and so compose their own courses, but the content of the curricula is steered by the Ministry of Education, and the teachers prepare for exams. The many institutions of the Folkeoplysning (the enlightment of folks) are different in many ways, but there is no curriculum and no exams. The heads of the Folkeoplysning can choose almost anybody as teachers.

The act of the VUS is built on the idea that the renewal of adult education must come "from the bottom". The Ministry of Education has only few demands on the approval of the courses and the learners of the VUS are free to choose the place and the curricula of their courses. The act of 1994 maintains the principles and expand the period of subsidies from 16 weeks to 40 weeks.

1.2 Methods

The traditions of the Folkeoplysning gives the private institutions the freedom to develop the curricula and to develop the ways of organizing the

courses. This freedom, the few demands of approval and the very simple ways to administrate the act are some of the explanations used to explain why the law of the VUS became a success. However the carefully steering "from above" and the idea of the decentralization implies a lack of basic data. The Danish Ministry of Education knows for example nothing about the number of courses a year because of the fact that the Ministry only register the application of the single learner. So it became necessary to map all the courses and go through some case studies.

A very comprehensive collection of data through telephone-interviews was carried out in the first four months of the year of 1993. We used telephone-interviews because of bad experiences from a corresponding survey carried out with questionnaires in the year of 1992. It appeared to be difficult to get the questionnaires back from the institutions of the adult education and the quality of the answers were changing. This time some of the institutions of the VUS were very small for example many of the local Adult Educational Associations.

The fundament of the survey of the year of 1993 were a questionnaire of 9 sides in which the curricula and the ways of organizing the courses were described. It turned out to be a problem, that some of the institutions did not have much written information at hand about the courses of the VUS. So the telephone-interviews took their time. To collect data in this way takes its time but in return it gives a complete covering and a high quality of data. We had to give up some questions because the leaders or the institutions did not have the answers. The teachers could have given us many important informations but it would have broken the economic frame of the survey.

The quantitative material were supplemented by four case studies. We examined the planning and the accomplishment of four courses for workers within a municipal homecare, a municipal kinder garden, a metallic industry and a brewery. In the case studies we tried to examine the co-operation between the place of work and the institution of the VUS. The collection of data were carried out with the help of group-interviews, intensive interviews and observations as participants.

1.3 The Mapping of the Courses

One of the main results were that institutions of the VUS started 435 collective courses in the year of 1992. The concept "collective course" was invented because of the acting of the learners. It showed out that groups of colleges from one or more places of work did apply collectively for VUS and

afterwards they did form a course for colleges only. Most of the courses in the year of 1992 were collective.

Courses were started in all counties in Denmark and in each of the counties the courses formed a varied picture. If you look upon the courses from the scale of Denmark you will see a pattern:

	Courses
The vocational schools	36
The county adult education centres (AVU)	141
The institutions of the popular enlightenment (folkeoplysning)	205

The Institutions of the VUS were different in many ways. It was expected that the public institutions of the AVU would have taken care of most courses but it turns out in another way. Most of the courses were started by the private institutions of the Folkeoplysning. The concept of "Folkeoplysning" covers in this case the adult educational associations, the folk day high schools and the folk high schools.

The development can be explained in many ways and some of them are economical. In this case we notify that many of the learners of the VUS were not taught at the public institutions of the AVU although these courses often were the cheapest. In what follows the private institutions of the Folkeoplysning are examined:

	Courses
The adult educational associations	153
The folk day high schools	49
The folk high schools	3

Again there several possible explanations. One of the interesting facts behind the numbers are that one of the associations - the Workers Adult Educational Association (the AOF) did carry most of these courses through. It is obvious that the Folk Day High Schools - a new kind of folkeoplysning - played an important role. The Folk High Schools are boarding schools and are not accustomed to learners only in the day. This might be one of the explanations why their number of courses were little.

The AOF - which organized both many of the adult educational associations and some of the folk day high schools - did a great job in supporting the planners on the local level. And many of the local trade unions co-operated

with the institutions of the AOF. The co-operation between these two parts is one of the ways to explain the following numbers:

	Courses
The institutions of the AOF	190
Other folk day high schools	6
Other adult educational associations	2

As you see the private institutions of the AOF with their 190 courses were the most important contractor and the public institutions of the AVU with their 141 courses were the next important.

2.0 The Planning

Due to the four case studies and to others reports we have some knowledge about the development of the courses of the VUS. The initiative often comes from the local deputy of the trade union and some times too from the management and from the learners themselves. The cause could be a fall in the productiveness or a lack of contracts combined with the new comprehension that the workers lacks general (soft) qualifications. Or it could be the plans of the management concerning a change over that would meet the workers with new demands of general qualifications.

When the management and the deputies of the workers have come to the conclusion that the workers need "a lift of the general qualifications" they start the planning. Educational planning is not common neither in the private companies or in the public institutions but after the act of the VUS it this a fair way to go.

One of the important resultants from the telephone-interviews is the high diversity of the places of work that get involved. We found that 16 lines of private companies and 11 sectors of public institutions were involved in the courses of the VUS.

2.1 Who are the Planners?

The planning and the carrying through for the first course were a hard job for the planers. However when the first course was brought to an end most of the barriers seems to have disappeared and very often the management and the deputies of the workers starts to plan the next courses. Often the

courses of the VUS are arranged in series. Most of the planning is done by the management and the deputies in a good co-operation and very often they get help from some external advisers.

It seems as if there were tree kinds of advisers. Some of the advisers came form the institutions of AVU or the institutions of the Folkeoplysning, others from the trade unions or from the counties. The division between the three kinds of advisers vary and the planning was carried out in different ways in all the counties. It is notable that some of the institutions of the AVU and the Folkeoplysning did not take part in the planning. It seems as if the external advisers from the trade unions very often planned the curricula. Some of the trade unions preferred public courses with the possibility of exams and others preferred the courses without the exams. Some of the counties made efforts to encourage the planning of the VUS by giving extra grants and by hiring advisers with special qualifications. The advisers of the counties are independent, - it is their job to make sure that the institutions with the right competence starts the courses. The unions were no doubt the most important external advisers in the year of 1992.

The Guidance of the Ministry of Education makes it clear at the learners of the VUS has the right to choose their own curriculum. In practice this influence seems to be delegated to the planners and the advisers. The task of the planners and the advisers are to make the collective courses "tailored" for their target group. Some times the learners have planned parts of their course but we have not found courses planned by the learners themselves.

2.2 How is the Planning arranged?

The planning is very often a complicated process. According to our telephone-interviews 237 of the 435 courses were connected to two or more places of work. This means that the planners had to consider the production of two or more places of work. Besides that it is a fact the 207 of the courses were combined with systems of rotation. In these systems do unemployed workers get the jobs while the learners attend their courses. Very often the unemployed workers are trained for some weeks before the start of the courses. So it takes both time and some ingenuity to make the puzzles of the planning.

According to one survey (Karin Andreasen et al, 1993), some of the external advisers often lack knowledge about the systems of education. In fact some of the institutions of the VUS too need to develop competence as advisers. Another problem is that the readiness for VUS is little in some of

institutions. Especially in some of the institutions of the AVU who cannot oblige the demands of the private companies. The advisers of the counties does a good job and some of them have developed special procedures to give the learners most influence on the curriculum.

3.0 Ways of Organization

The demands that the courses of the VUS should be tailored so that they fit to "the needs, demands and qualifications" of the learners has apparently been taken seriously many places. It is a fact that these courses are organized in many ways and it seems as if the many models are due to the learners plays a role. Some of the main models are described in the following part.

3.1 Combined Courses

In a few years the combined courses became common in Danish Adult Education. The Ministry of Labour and the Ministry of Education tries encourage the institutions to develop courses, where teachers from two different institution cooperate, and the number is growing (Søren Ehlers and Bjarne Wahlgren, 1993).

The Ministry's guidance for VUS recommend combined courses, and the practice of approval in the Ministry prompt the institutions to start combined courses. The telephone-interviews discloses that 194 of the 438 courses were combined. More than one third were combined in the year of 1992. Especially the politicians wants courses that combine general (soft) qualifications with vocational (hard) qualifications and that is why the Danish Parliament has granted 200 millions for combined courses.

One of the questions concerning the combined courses is how the teachers cooperate. Some of the Danish researchers are discussing the integration between the soft qualification and the hard qualifications. It is difficult to find any effect of these attempts of integration, and that is why the number of parallel-education have been examined. Did the teachers from two different institutions teach in the same weeks or did thy not? Were there any possibilities for integration? Due to the telephone-interviews we know, that many teachers of the VUS did practice parallel-education. 137 of the 194 combined courses were arranged as parallel-education. It seems as if some kind of integration is growing in the courses of the VUS.

3.2 Education in Parts and in Exchange

The guidance of the ministry gives very few limitations concerning the ways of organizing the courses, and the consistency is that the courses vary in many ways. It is obvious, that considerations to the production means, that the planners develop many untraditional courses. The telephone-interviews reveals, that the planners try to make courses where the learners continues to be in contact with the place of work. In this way some sort of exchange between work and education is created, and many of the learners are very fond of this idea. They say that it makes they fell more safe when they return to work during the course.

In an education in parts are some of the labour-hours in the week used for education at the place of work or in an institution of adult education. The telephone-interviews tells us, that the planners have developed any models for education in parts. They also tells us that 76 of the 435 courses were organized in this way.

Another popular model is the education in exchange (the sandwich model). Especially in places where the learners work in turn. Some of the courses are organized such as two teams changing between work or education every third week. In this way the learner obtain to keep the connection to their work, the possibility to use their new knowledge during their work and an expansion of their period of education. 141 courses were organized as education on exchange. This means that a third of the VUS-learners were taught in accordance with the sandwich model during the year of 1992.

4.0 Subjects and Themes

The discussions on the relationship between the soft qualifications and the hard qualifications has been going on. The Ministry of Education does not allow that the courses of the VUS only gives the qualifications wanted by the management of the company. The courses of the VUS are not allowed to just in-service training.

It is rather difficult to draw the line between the soft (general) and the hard (vocational) qualifications. Sometimes the same qualifications are general and other times they are vocational. It depends on the connection - upon the kind of work. The new act of the VUS does not distinguish between the qualifications. The only demand is that the curriculum must be described in a Danish act on education.

In this paper we do not want to start a discussion about the freedom of choice for the learners because we know very little about the decision-making. We will instead try to compare the curricula in two systems of education. The first is the formal system of the AVU - the County Adult Education Centres - the other is the non formal system of the AOF - the biggest adult educational association in the Folkeoplysning.

4.1 Subjects in courses by the formal system of the AVU

The institutions of the AVU gives the individual learner the opportunity to combine the subjects into a "personal" curriculum. The act of the AVU (1989) distinguish between the core-subjects, which all the institutions of the AVU are obliged to start and the offer-subjects, which only one institution of the AVU in every county is obliged to start. This tells us that the legislators had the idea that some subjects in the adult education are more important than others.

Our survey of the curricula in the courses of the year 1992 reveals, that the learners did choose their subjects in an other way than the predictions of the legislators. The following line of subjects are placed after frequency:

1. Danish, 2. Mathematics, 3. Informatics, 4. Psychology, 5. Language, 6. Civics and 7. Science

The act of the AVU defines informatics and psychology as offer-subjects, but the learners of the VUS wants these subjects as core-subjects. The difference can be explained in many ways. One of them is the fact that the society changes very fast in these years and so does the needs and demands for qualifications. The choice of the learners of the VUS tells us that the curriculum of the Danish workers are changing.

4.2 Themes in courses by the non formal system of the AOF

The AOF does not have subjects in a line as the AVU. Most of the education in the AOF changes every year - and this is common in the Folkeoplysning. Another thing is that most of the adult education in the AOF are arranged as themes. The learners of the AOF wants to be taught in themes - especially in themes with some connection between. There are of course some subjects. In our adapting of the data from the telephone-interviews we have arranged the chosen themes into 7 groups. The following line are placed after frequency:

1. Themes from Psychology, 2. Themes from Civics, 3. Danish, 4. Themes from Art or Music, 5. Informatics, 6. Mathematics and 7. Themes from Athletics and Health.

The learners of the VUS wants as you see subjects as Danish and Mathematics, but these subjects does not have the highest priority for them. They want to work with new themes - themes about their lift of today. When we compare these results with the results of the AVU we also see some similarities: The learners of the VUS want to be taught Psychology and Informatics.

4.3 The Connection to the Folk Day High Schools

The line of themes and subjects from the institutions of the AOF are very much alike the line of subjects and themes in the Folk Day High Schools. In a survey by Jacob Krøgholt (1993) he goes through the themes and subjects in the curriculum of these new schools. The curriculum in the Folkeoplysning of the Folk Day High Schools are according to Jacob Krøgholt not the result of any coincidence or ideology but the experiences through 10 or 15 years work with unemployed learners in this kind of Folkeoplysning. The act of the Folk Day High Schools came into force in the year of 1991.

It seems as if some of the traditions in the curricula of the AVU and the AOF have been transmitted to the VUS but the work are to be found in the curriculum of the VUS. And the learners of the VUS are employed many different places - as we have mentioned we have found 16 different lines of trades and 11 different lines of public sectors. However the curriculum of the AOF is no matter whether they are organized by the Folk Day High Schools or the Adult Educational Associations very much alike the description by Jacob Krøgholt. The AOF were the biggest contractor of VUS in the year of 1992 and seems to use many of the experiences of the Folk Day High Schools.

5.0 Summary

The results in this paper are all provisional and it is not possible to come to a conclusion. It seems as if the learners of the VUS makes other choices when they are given the traditional opportunities of the Folkeoplysning.

5.1 Considerations

As we have mentioned before the act of the VUS is a true success because of the collective courses. It seems as if workers with a short education or training want to get adult education if they can learn together with colleges from their own place of work. The many models for organizing the courses of the VUS tells us that the courses have been carefully planned. So the odds are that the planning of the curriculum is carefully too.

References

Andreasen, Karin, Hansen, Helen og Vedel, Gitte (1993). *Uddannelses- og jobrotationsprojekter.* Arbejdsmarkedsstyrelsen

Ehlers, Søren (1994). *VUS - de skræddersyede forløb.* Forskningscenter for Voksenuddannelse.

Ehlers, Søren og Wahlgren, Bjarne (1993). *Tværsektorielle forløb mellem AMU og VUC.* Forskningscenter for Voksenuddannelse

Eklund, Susan og Wandall, Jakob (1991). *VUS - det første år.* Danmarks Lærerhøjskole og Udviklingscenter for folkeoplysning og voksenundervisning.

Eklund, Susan og Wandall, Jakob (1992). *VUS. Resultater og perspektiver.* Danmarks Lærerhøjskole og Udviklingscenter for folkeoplysning og voksenundervisning.

Eklund, Susan (1993). Education during work periods: Evaluation. In: *Social Change and Adult Education Research.* Adult Education Research in Nordic Countries 1991/92. Copenhagen.

Krøgholt, Jacob (1993). Daghøjskoler. In: *Uddannelse* nr. 5.

Vejledning om voksenuddannelsesstøtte (1991). Kulturministeriet.

QUALIFICATION AND WORK

Qualification and Work

Basic Concepts and Danish Research

Henning Salling Olesen

Roskilde University

Abstract

This article is meant to open a discussion of the relevance and content of the concept of *qualification* in adult education research. As a background I shall present different lines of research in Denmark in (adult) education research, that refer to the concept in a quite different way, emphasizing the functional and the critical aspects of the concept in the context. On this background I shall discuss definitions of the concept, and the interpretation of the concept of work included in them. Finally I shall present some of the ideas of our present research, that are responding to some of the dilemmas and problems in previous research, leaving the presentation of concrete projects to be done later.

Background

One line of research goes back to the great educational optimism of the 60'es, and the new left criticism. In Denmark the pedagogical thinking was formed by *anti-authoritarian pedagogics and by humanistic development psychology* (Eriksson, Berlyne) and Piaget, forming an individualized, libertarian and very optimistic professional ideology of schools. One first questioning of this optimism came from positivistic sociology, proving that the strive for educational equality in the welfare state was failing. This led into an enrichment in pedagogical thinking by socialization research, including aspects of class, culture and gender differences, that today seems evident.

A much more radical questioning, came from the reconstruction of marxist theory, defining the role of school and education, as that of *qualifying for wage labour*. Defining this qualification in the structure of wage labour, it

defines two aspects of learning: Achieving skills, that are in their form adequate for fulfilling specific tasks, defined overall by capitalist development of production, and at the same time being disciplined to adapt to more or less inhuman work conditions, and in general to accept and adapt to societal order (*negative* or *intensity* qualification).

On this ground a critical reflection of all types of pedagogical questions, of teaching, of functions and contents of single subjects and etc was added a new dimension to education.

On the one side the concept of qualification provided a framework for a didactic reflection on the relation between education and *work* - especially influential in vocational education and training. On the other side the traditional dualism between "individual" and "society" was reformulated into a *subordination of individual under (capitalist) society by education*. However, it might sometimes tend to become a simplistic image, projecting the societal order of capitalism into the phenomenal form of industrial work - reducing very much the concrete skills, and giving a true, but extreme, image of the so called negative qualifications, like tolerance to repression, discipline, routine etc. This simplism curtails the understanding of the division of labour and the development of new areas of wage labour, that definitely need not only further skills, but also a high level of "positive work identity", like services and social care. In a marxian sense, the research tends to exclude the objective necessity of the worker`s subjectivity as a work qualification.

Not only pedagogical and didactic research was stimulated by this marxian framework - also a lot of research into education policy and planning, including all major school reforms, were analyzed and criticized on this background - sometimes very roughly, reducing complex phenomena into illustrations of general laws, in other cases with more sense for contradictions.

Some of the basic assumptions of this marxian inspiration are now accepted background knowledge in education - although at the same time their constitutive connection with a critique of the political economy of capitalism tend to be forgotten.

Another, and quite different line of research, applies theory and methods from industrial sociology in research into the relation between work and education. One inspiration was the attempts to "go empirical", inspired by a marxian tradition, like f.i. the well known research H. Kern and M. Schumann. Another was the needs of public authorities, trade unions etc.

to establish a scientifically based ground for planning and decision making in training, vocational education, continuing education etc. On the basis of an everyday language meaning of the concept "qualification", meaning acquired skills for work, a "social technology" developed. Empirical research was carried out into phenomenal development of work processes, and qualification needs were deducted from this.

This research has different approaches, depending on the reasons for the individual research project.

A large stream is concerned with "technological changes" and the consecutive needs for qualification, or the demands to serve one special new technology.

Some are focused on a specific type of skilled work, and its applicability (f.i. on behalf of a trade union).

Some investigate from the point of view of one special type of education the developments needed to adapt to changes in work and technology.

Some look upon the consequences of major structural changes in work force, like the growth of the service sectors.

Examples from danish empirical research

This line of research has produced a lot of very useful empirical knowledge about work processes, and in some cases also - overloading the empirical paradigm a bit - emphasized the alternatives open to future development. By the concept of qualification it has made clear, that the development of societal production has direct consequences for human labour - or rests on certain preconditions: A historical and more comprehensive understanding of technology and work.

Mainly this type of research is assumed to provide an empirical background for implementation of education. This is a very problematic assumption not only because it so to say neglects all "technical" problems of how to produce a specified qualification. But also because it assumes that educational goals and means *should* be derived from the development in the work process alone. This objectivistic definition of qualification needs is uncritical in so far as it does not question the economic and societal order, and often assumes a unilinearity in work process development, leading to a demand for subordination of the individual worker under the demands of the

"development". Extending Janossys concept of the labour market adaptation mechanism one might describe this paradigm in a scheme like this with a one way determination presumed:

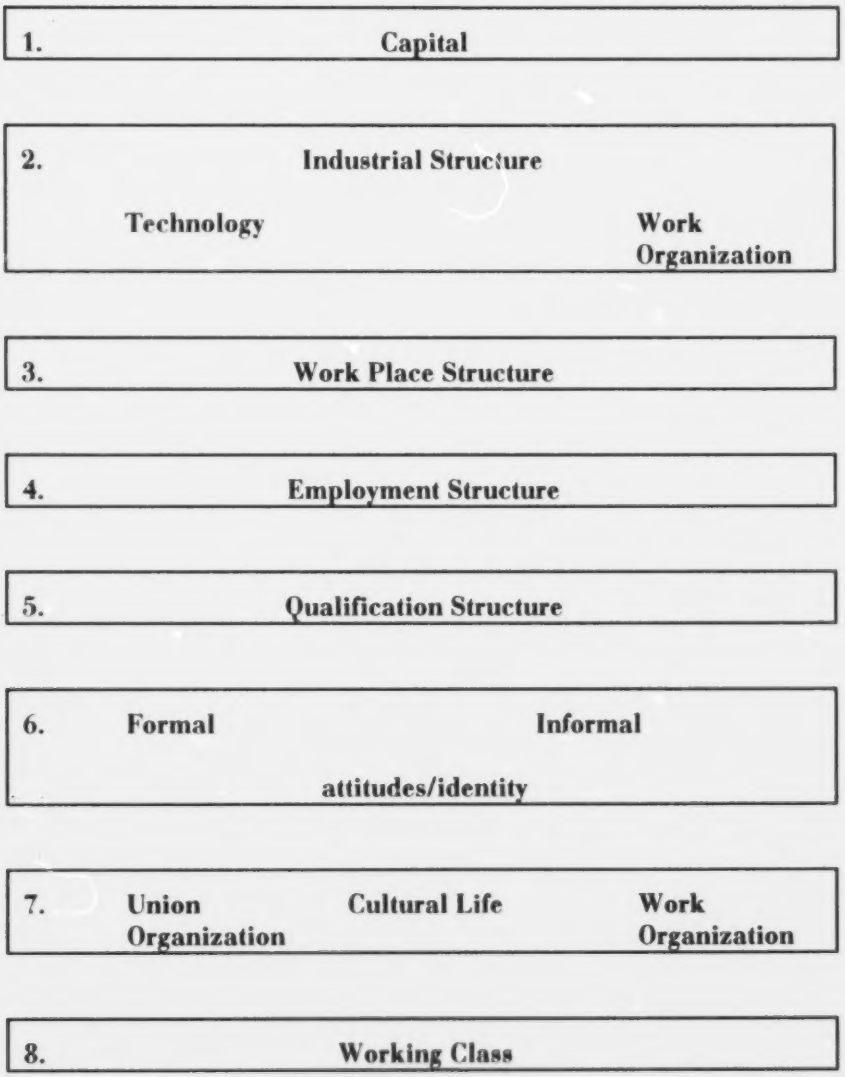


Fig. 1

Similar types of research has been carried out on the possibility of substituting different kinds of qualification, either on a company level, smoothing restructuration of the companies, or on a regional level, analyzing bottle necks in the labour market and/or possibilities of improving employment through new industrial initiatives.

General qualification

Today a merge of the two types of discussion can be observed. In the industrial sociology research a tendency towards general qualification is observed in industry and in society in general. This also includes the types of negative qualification, included in the marxian critical use of the concept. For this reason a discussion about the concept has gained a new theoretical as well as practical importance.

Our present qualification research project is concerned with *general qualification* in relation to training and continuing education for industrial workers (see description in Andersen/Illeris). On the described background it deals with the *qualifying processes*. Education and training are of course assumed to be important settings for such processes, but we work with a broader concept of learning, including everyday life learning.

The appreciating and critical remarks above about different concepts of qualification and their findings have been summarized in a provisional definition of qualification - which is then immediately open to some new questions raised by some other findings and by certain societal developments.

We are distinguishing between:

competence or *capacities*: all acquired skills and knowledges, that a person has, even if it is not utilized - and:

qualification: all competence/capacities necessary or relevant for carrying out societal work.

Competence/capacities are subjective entities, acquired and activated within the context of an individual person. They are also qualifications in so far as they are relevant to societal work. Qualification is a societal and structural definition, a result of real history, and mediated by division of labour, actual economic relations and subjective (cultural and individual) factors, that influence work.

The empirical research in work qualification, in searching for one-to-one specification of demands on labour, tends to find an increasing importance of *general qualification* of different kinds

- basic technical skills rather than specific ones
- basic knowledge, cultural techniques (foreign language f.i)
- intellectual skills, that are basic and developed over a long period of time
- certain attitudes like responsibility, flexibility, cooperative etc - social skills, that tend to be personal characteristics.

Obviously qualification consists of and depends on mobilizing (personal) competencies/capacities in an ever increasing way. The demand for *subjectivity* is becoming more and more obvious in practical life, and also in research, in spite of the research interest and the basic conception of qualification needs of this industrial sociology approach. A contradiction coming from a real contradiction in industrial development in the post-taylor era.

The marxian critical concept of qualification introduces a "negative qualification" which is seen as an enforced or even distorted human competence/capacity, that is *only* relevant because of capitalist economy as a destruction of individual subjectivity. It`s not so simple - the historical acquisition of basic social abilities have a much more double character, as can be seen obviously by craftsmen or by women working with social care. Its concrete aspects seem to be partly the same as the needs for social skills found by industrial sociology.

Reflecting a historical difference between taylorism and post-taylorism, and the changed way of utilizing human labour, it must be regarded as the same. The societal field of conflict between labour and capital is projected into the category of *general qualification* in different forms. The ever inclining importance of general qualification may - and must - on the one side be seen as increasing societal appreciation of human competence/capacities, promoting education and humanization of work - on the other side it situates fundamental societal conflicts in the individual handling of work and even the personal development of work qualification.

The subjective perspective

As a critical opposition to the objectivistic approach, inherent in both empirical industrial sociology and in marxian critical theory, we need a concept of human labour as a subject, whose competencies/capacities is

produced and integrated under his own perspective - not independently, but not being reduced into an object either.

This becomes especially obvious in a new situation where societal conflicts are individualized, because class cultures are being more or less dissoluted. But even in a classical capitalist period, where working class and trade union formed an antagonist societal subject, the individual worker had to integrate these conflicts in his personal work identity.

On the level of education it is obviously destructive to objectify learners. In the context of vocational training and education, where labour is treated as raw materials, a subjective understanding of qualification may contribute to improve pedagogical understanding of learning processes and the (modest) role of education/training.

For these reasons we have seen it as an overall problem to elaborate the *subjective* aspects of the qualification concept.

One could illustrate the relevant levels of qualification analysis with the rest of the Fig 1 (levels 6-8), observing levels of analysis that have usually been neglected in the qualification research.

The individual development of competence/capacities is in reality a historical product of societal development - first of all the economic structure and the division of labour. But is fulfilled by the social and cultural organization of life and socialization - in family and class culture, in the workplace and to an increasing degree by formal schooling.

The subjective aspect of qualification may be seen as simply socialization - and in that sense setting a *life history* framework for studying the learning processes, that provide competence/capacities, and for the subjective way of integrating learning processes, that are not only or mainly related to work, but may still be a ground for qualification.

This means making socialization process transparent in the perspective of qualification. This is the way we are approaching in our general qualification project, because it seems feasible as a critical contribution to the pedagogical thinking in labour market related education and training.

As a first step we have developed a "search model" of dimensions in subjective processes, relating to work life as well as "social life in general", and indicating levels of generality. This model is meant to help identify the interrelations of different subjective processes, under the assumption that

social interaction and structural relations are relevant influences and perspectives, but that their are being - and must be - integrated in an individual integrating process, provisionally named "identity". We are very well aware that the concept of identity and work identity has been overloaded by a lot of more or less ideological meanings. The complex question to which extent a basic socialization is a prerequisite for personal integration under the conditions of wage labour is left to be an open question.

For a presentation of this model, see Lars Ulriksens article.

But there also remains a broader question about in which sense the worker may be(come) subject to his own work, and in a societal sense, a question about democracy. I'm not going far into it, but just indicating the relation to

- the dissolution of working class cultures, and the outdating of traditional working class attitudes
- the "individualization" of work and liberation of individual social possibilities and emotional orientation
- the new political issues like ecological viability.

In between, closely connected with the qualification and the social forming of individuals is the questions about division of labour. Or, in societal perspective, the relation between the individual worker, being the subjective carrier of qualification, and the "societal worker" ("Gesamtarbeiter"), carrying the total and structured qualification. The differentiation in the access to work, the types and degree of control over work, the range of responsibility is on the one side closely dependent on individual competence/capacities - on the other hand the societal structures very deeply influence the development of them - indirectly by forming class structures and cultural segmentation, directly by the work condition and related education as socializing settings.

The questions about the key qualifications in relation to division of labour deserve much more attention, and we believe, that some of them are part of the clarification of the term general qualification. Not only machines and computers, but also social organization, represents monopolizing of human competence. Democratization is not only a question about power, but also (not only) calls for a vast learning process.

On a cultural and political level this might also be described as a question about the relation between the individuals, who hold different parts of the

total labour force qualification, f.i. different areas of technological skills, manual skills, organizational and political knowledge - and the cultural integration of such differences.

What is work?

The provisional definition of qualification, relating human competence/-capacities to work, leaves a number of questions open.

First, the theoretical reflection as well as the empirical research has been concentrated on industrial work, and the developments in industrial work. This will not cease to be a key sector. But not the only one, and numerically not the major part of labour. So this calls for trend analysis and qualitative comparison between different kinds of work. This lead to the question about division of labour and differentiation of work qualification.

Second, the question could be raised if we are only defining qualification in relation to wage labour? What about petit bourgeois production modes in agriculture etc? It could be argued, that the concept of qualification should be related to a societal mode of production at least predominantly based on a labour market - which means that wage labour defines the overall work identity, and also defines the competencies/capacities, that are produced or utilized in other modes of production, as qualification. However, demands for participation and workplace democracy tends to define such skills and attitudes, that might be connected with petit bourgeois - like entrepreneurship, unlimited responsibility, identification with the individual firm, saving instead of using - into labour qualification.

And what about the other types of work, included in this mode of production - especially house work and unpaid "cultural" work, that are functionally necessary in the reproduction of wage labour? Obviously, reproduction work does raise new needs for specific qualifications, and also implies f.i. personal skills and attitudes historically developed as social gender, as femininity.

The developments of new wage labour areas within societally organized reproduction - social care, kindergarten, etc - defines such competence/capacities as qualification, and practically until now benefits from the spontaneous sources in female socialization.

This is one more area, where the seemingly clear and unproblematic definition of qualification by its relevance to work becomes complicated.

I shall not go deeper into this on this occasion. The point is not that the concept of qualification is spread out on the whole social world, but rather to illustrate how this concept embraces some of the central issues of modern society under the point of view, that they relate to human work and the societal organization of human work. This means, on the contrary, a definition of the problems about the range and conditions of relevance of that concept - i.e. a contribution to conceptual clarification.

On the other hand, it implies that work and wage labour should be regarded as constitutive frameworks for adult life and adult education today.

References

Vibeke Andersen/Knud Illeris: *General Qualification*, RUC 1993.

Vibeke Andersen m.fl. *Kvalifikationer og levende mennesker*, Almenkvalificeringsprojektet, Report no 2, 1993 (publ by Adult Education Research Group).

Henning Salling Olesen: Kvalifikationsforskning - uddannelse og arbejde, in: M. Kyrö: *Kvalifikationsforskning - bas för utbildning?* Stockholm, Carlssons, 1987.

Lars Ulrichsen (ed) *Perspektiver på almenkvalificering*, Almenkvalificeringsprojektet, Report no 1, 1992 (published by Adult Education Research Group).

Change of Perspective in Qualification Analysis

Presentation of a Search Model

Lars Ulriksen

Adult Education Research Group
Roskilde University

Abstract
On the basis of an on-going research project about general qualifications conducted by the Adult Education Research Group, the article presents an alternative look at qualification analysis as it is usually found in, for instance industrial sociology. The article emphasizes that a qualification analysis which aims at education and qualifying of the labour force should have a wider focus than working life and should include the experiences and resources of the individual that are rooted in life outside work. Consequently the analysis should take its starting point in the individual rather than in the work process. This point is presented through a "Search Model" which also suggests a new terminology of general qualifications.

Introduction

New production designs and new conditions of competition have caused production managers and the educational system in Denmark as in other countries to interest themselves in developing qualifications of un- and semi-skilled workers. Interest has not been focused on technical skills, but primarily on the type of qualification that is often described as soft, general or broad. As examples one will frequently find qualifications such as understanding of production and of the specific working context, the ability to cooperate, speaking a foreign language, responsibility, flexibility, the ability to think analytically, independence, etc. (cf. Directorate for Adult Vocational Training Programmes 1988). Terminology differs and is often seen to be inconsistent.

Attempts to transform the need for qualification into educational action have emphasized the need for clarification of terminology. When one is to use the concepts in educational and pedagogical contexts, inconsistencies and ambiguities become acutely apparent.

In the context of the so-called General Qualifications-project (cf. Illeris 1992) the Adult Education Research Group at Roskilde University has developed a set of concepts that can clear up some of the terminological mess in the field. In Andersen et.al. (1993a) the set of concepts is presented in shape of a 'Search Model' (for a short presentation of the Model, cf. Andersen et.al. (1993b)). In the following pages I shall give a brief summary of the principles and analyses on which the concepts are founded, and afterwards I will roughly present the 'Search Model'.

The status of the Subject in the industrial sociology

When it comes to educational and pedagogical implications of analyses of needs of qualification it suddenly becomes very obvious that one has to do with *people*, with individuals, and not simply with workers as a collective cliché. This has to do with the fact that in most educational contexts (that is in the Danish context) education takes place outside the factory, in vocational training centres. Thus the teacher and the pedagogical researcher are confronted with a number of people who are actually present, acting and reacting into the teaching process. Their daily working routines and contexts are only present through the practice, activity and speech of the participants.

The picture is the opposite for the industrial sociologist who analyze the working process in a factory, office or whichever work is in focus. In this case the activities, the routines and the devices of the specific work are the main interest of the researcher. The worker is present as yet another aspect of the working process, an important one that is, but still regarded from the point of view of the working process. The worker as an individual is recognized only to the extent that he or she is for some reason (technical, personal or both) not capable of carrying out the job.

The difference between the point of view of the educational or pedagogical analyst and that of the industrial sociologist on the worker is quite logical when the main object of their respective activities are taken into account: the educator's interest is the qualifying of the subject, whereas the interest of the industrial sociologist is the organization of the working processes.

But at the same time this difference of perspective is an important source of the inconsistencies of terminology. The concepts normally used derive from qualification analysis in the industrial sociological tradition (and in the Danish context particularly the German branch). So the starting point has been the working process regarded as a technical issue, and therefore it is primarily qualification related to the technical aspects of the process that has been described and conceptualized. This having been done, a number of rest-qualifications have been diagnosed. By this I mean qualifications that are not defined or conceptionalized except by not-being the positively defined (and usually technical) qualifications. These qualifications have been diagnosed as related to the worker, but have, somehow, been difficult to describe, and there has been an inclination to piling up these more unhandy qualifications under the label of 'general qualifications'.

However, the status of the Subject in industrial sociological analyses has varied in different analyses and over the years. A radical position can be found with Mickler et.al. (1976). Here it is stated that the actual qualification available with the worker is only taken into account to the extent that it is recognizable for the qualification demand of the workplace. It is the view of the researchers that the workplace determines to which qualifications the workers will have to adapt in the long run. It is interesting to notice that Mickler et.al. imply that the possibility of the workers having a qualification surplus, i.e. qualifications they do not have the opportunity to activate in the actual working process, does in fact exist. But the difference between the qualifications demanded and the qualifications possessed is neglected on account of the determinative force of the capitalistic production conditions. Thus the Subject, the worker, is regarded as an object of the societal qualifications demand.

Others, like Kern & Schumann (1970) and Drexel & Nuber (1979) recognize the importance of workers in analysis of the working process. But in their analyses it is not the actual, empirical worker with ambigious and often conflicting experiences and interests, who is taken into account. It is rather the worker-subject as it appears from the analyses of the working function. The authors mentioned are aware of the importance of the workers cooperation and activity for the workprocess and production, but in their analyses a model of a worker is described - not real workers of flesh and blood.

The tendency to neglect the living workers have weakened during the years. There has been increasing awareness of the dialectic relations between work and workers. This is the case in an analysis of the changes in office-work (Baethge & Oberbeck 1986) where the authors point to the importance of

considering not only demands from work to workers, but also the other way around: demands from workers to for instance the potentiality of the work. It is also the case in German analyses of the consequenses of automation, where it is e.g. stressed that some element of interpretation is always performed by the operator even when the process appears fully automatic (Projektgruppe Automation und Qualification 1987).

In the research concerning the *meaning* of work to workers it is naturally even more obvious that workers do not merely walk into the factory, leaving their brains in the locker, doing what they are supposed to do for 8 hours and return home, putting their brains back in on their way out. The workers actually do something with their work in order to attribute some meaning to it, even if it has not got any in the first place. Thus even to the most monotonous routine work is attributed some kind of subjective meaning (cf. Morgenroth 1990 og Becker-Schmidt et.al. 1982). But the attribution is not merely taking place in the minds of the workers. Volmerg et.al. (1986) describes how female routine-workers change their working routines, thereby acquiring competence that was not given them by the employer.

The subject's performing the actual work are therefore not only influenced by work itself. The working process is influenced by the workers as well. This becomes apparent when the workers' activities lead to dysfunctions, but often it is the other way around: the activities of the workers improve the production process by implementing skills and abilities originally not required (and not paid for) by the employer, but which are nevertheless important resources for the company.

Basic principles in the Search Model

So the call for a change of perspective in the discussion of qualifications in general, and of general qualification in particular comes from two angles. One angle is that of the educational system, where difficulties in transforming qualification analysis into educational actions and teaching are experienced. The other angle is caused by the problems of the qualification analyses themselves. They cannot very well explain why workers act and react like they do, especially they make the production process and work organization turn out differently than expected by their unprecedented actions. This is not explainable without including the worker as a subject.

The need for a change of perspective has been the starting point for the efforts to construct a set of concepts that should actually grasp general qualifications. The Search Model is our suggestion of such a set of concepts.

It should be stressed right away, that the Search Model is not to be seen as a replacement for industrial sociological analysis. It is a supplement, but when it comes to general qualifications an absolutely necessary one.

In comparison with traditional concepts the change of perspective implies additional changes. Firstly we talk not only of qualification, but of *qualifying* as well. For qualification should not be seen as static, but as exactly the opposite: something changing all the time. The subject is, in fact, ceaselessly qualifying. This is all the more relevant for our project as we are dealing with the question of developing qualification, partly through teaching.

Secondly we distinguish between *qualifications and capacities* - and we include both in our analysis. By capacities we mean all the abilities of an individual, everything he or she is capable of doing. Qualifications are the capacities relevant for what we call 'societal work', i.e. activities that contribute to the reproduction of society. Not all activities are societal work, but on the other hand not all societal work is paid for. Apart from the work performed on the labour market, examples of societal work is housework, bringing up children or unpaid work in political organizations. The point is that the subject possesses a number of qualifications that are not being used in his or her daily work, but which do exist as resources within the individual (and in some cases in a collective).

Thirdly we emphasize that qualifications are possessed by *entire living beings*. That means that one cannot simply regard the worker as a worker. The activities and experiences of work interact with experiences and attitudes of the subject that have their roots in other parts of the worker's life. In the same way qualifying does not only take place at work or in formal education. It is a process that takes place all the time, and in all different contexts of the subject's life. That means that the life of the subject outside work influences the way in which the subject performs his or her function as a worker.

Concludingly the Search Model shows subjectivity viewed in the perspective of qualification. Subjectivity is the central element of the model, but it is not a model of subjectivity as such. It is designed with specific reference to the subject as someone possessing qualifications. So the model should involve the person's life as a whole, not just working life. And it should reflect the fact that a variety of qualifications and capacities are embodied in the subject in different ways and in different depth.

A description of the Search Model

The model is divided into three areas, reflecting different contexts of the life and experience of the subject. The first area is the Area of Working Life. It is the area of the labour market, and one basic quality of the area is that it works under the logic of exchange value.

The second area is the Area of Social Life. It comprises what's left of life outside work, i.e. the family, the sports club, political life, friends and so forth. This area is not in the same way dictated by the logic of exchange value (apart from the degree to which capitalist organization forms practices in other areas). But it is important to remember that societal work is also performed in this area, and that some qualifications are used here.

The third area is the Personal Area. It refers to the subjective perspective of the individual, and it includes what is usually known as 'personality' or 'qualities', traits the subject bears with him or her into different contexts and interactions. The Personal Area is where experiences are being transformed into characteristics of the individual, these experiences always being based on interactions in one of the two other areas.

The three areas mentioned form a figure, which we call 'the Tulip' (fig.1). Experiences within each area contribute to the creation of both capacities and qualifications. The division into three areas serves two purposes. Firstly it draws attention to the fact, that both capacities and qualifications are used and performed in different areas of the subject's life, and that the different logics of the areas also influence the qualitative characteristics of qualifcation. So basically identical qualifications may have two different appearences dependent on the area in which the qualification is *used*.

In some cases it is crucial for the subject to distinguish between the ways in which qualifications are performed in the Area of Social Life and in the Area of Working Life. A nurse would not be capable of working as a nurse if he or she were tending patients as she would his or her own family. The underlying logic and principles of the area sets the limits of how the qualifications can be performed.

The second purpose of the division into three areas is to emphasize the significance of the area in which the qualification is *developed*. It bears a similar consequence to the qualifications as does the area in which the qualifications is being used. Additionally the area in which the qualification is rooted, also shows itself in the way qualification is inbedded in the subject,

i.e. what subjective meaning is ascribed to the qualifications and their practice. Apparantly identical qualifications may again in fact be different.

The Tulip points to the fact that qualifications (and capacities) should be considered and analysed in relation to the areas in which they are developed and in which they are used.

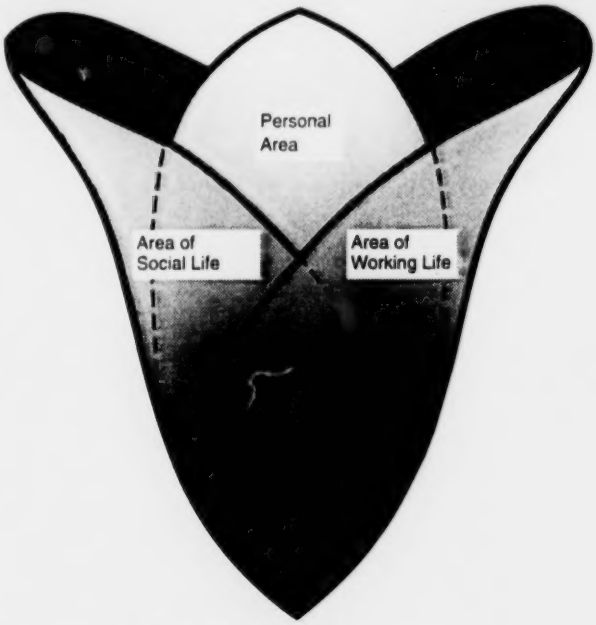


Fig. 1 The Search Model: The Tulip

Ill.: Christen Nørrelykke

Graphically the Tulip has the Personal Area as the core, with the Areas of Social Life and of Working Life as petals surrounding it. The borderlines of the areas are not to be emphasized or to be made look very exact. The three areas overlap, which is indicated in the drawing by dashed borderlines.

So far I have pointed to the distribution of the qualifications into different areas. But there is yet another distribution which has to do with how deeply the qualifications are imbedded in subjectivity.

Within all three areas qualifications are distributed on different levels. We have divided each area into three levels: *a basic level, a comprehensive level and a specific level.* The division indicates the different ways in which

qualifications and capacities are linked to the subject's self-perception, and the strength of the respective links. It also relates to the fact that some qualifications are broader, and consist of higher levels of understanding, whereas others are rather characterized by the knowledge of how to do things. This is one of the differences between the specific and the comprehensive level. In relation to the Personal Area the levels indicate how deeply certain qualities are rooted in subjectivity.

In all three areas the levels also point to different conditions for the learning of (or qualifying for) the respective qualifications. Qualifications on different levels require different learning processes, each corresponding to the characteristics of the relevant levels and areas.

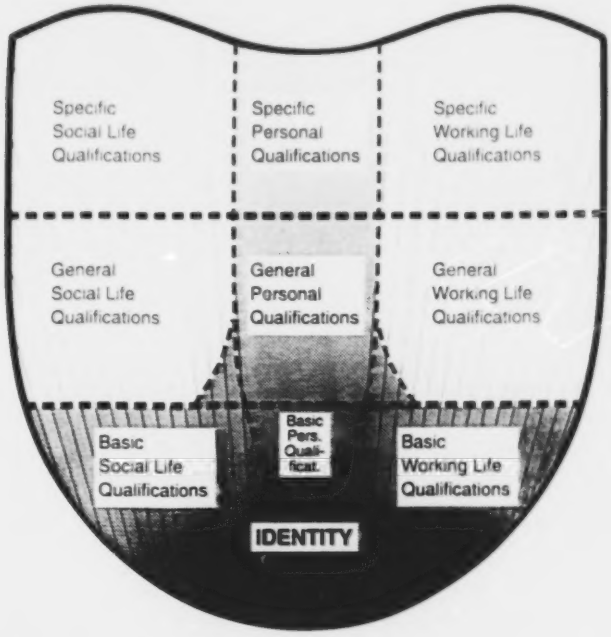


Fig.2 The Search Model: The Map

Ill.: Christen Nørrelykke

Thus we have what we call 'the Map' (fig.2), a Search Model with particular reference to the discussion of qualifications related to the subject, and the discussion of qualifying. The Tulip Model is to be conceived as a round figure with all areas bordering on each other. Likewise in the Map Model the borders should not be conceived as distinct or permanent, which is parti-

cularly important when it comes to the basic level. Here the three areas are tied up in each other to an extent that makes it difficult to separate them at all except for analytical purposes. The basic level contains what is often called Identity. Identity consists of elements from all three areas. It is not a fixed structure or characteristic but under permanent construction and reconstruction based on the interactions between different areas and levels in the subject, and between the subject and outside world.

The dynamic nature of the Search Model

Models have a tendency to make everything look as if it never changed, and as if everything could be placed in fixed little boxes, not being dependent on each other. Additionally the Search Model gets a rather individualistic touch to it, because of our decision to place subjectivity as the center from which qualifications are viewed. At first glance collective contexts or societal influences seem to have been omitted from the model. This is, however, not the case, but the dynamics of the model have to be applied by the user by his or her taking the underlying preconditions and implications into account. In the following I will mention a few of the factors that must be considered when using of the model.

As previosly suggested the single fields of qualifications are related to each other in such a way that changes in one field will frequently cause alterations in one or several of the others. This is true not only for relations between the basic level and the comprehensive and the specific levels (e.g. that basic acceptance of the organization of the labour market and capitalist economy influences more comprehensive working life qualifications, such as the ability to be part of a workplace; or that Basic Personal Qualifications are of importance in acquiring Specific Working Life Qualifications), but also between the areas on a horisontal level. Thus experiences made through one's specific location in working life (e.g. as a worker or as a superior) will often (but not always and not in a simple linear reflection) influence the Comprehensive Social Life Qualifications.

And the other way round, Social Life Qualifications have implications on Working Life Qualifications. This is an important reason for our insisting on changing the perspective of qualification analysis. An example of this relation is given in a survey by Birgitte Simonsen on the consequenses of the so-called "society without house-wives" (Simonsen 1993). Through interviews with a number of young people (age 16-20) she points to a number of new elements - indicating historical change - in young people's attitudes to work and to self-support. She ascribes them to changes in the social condi-

tions of their socialisation and childhood, first of all caused by the increasing number of women entering the labour market and also by the relatively high unemployment rate that has been a stable thing since the beginning of the seventies. Some of the young people in the survey have practically never experienced their parents having a job for any longer period of time.

The social values of these young people have been influenced by the changes in their social conditions which were on their part founded in societal changes and relations. Women having entered the labour market has been one of the preconditions for the changed status (and from a certain point of view: crisis) of the nucleus family, which has again influenced the possible expectations of girls growing up in this context. Two of the main result in Simonsen's survey is the girls' denouncing men as main supporters of the family: firstly the girls expect to support themselves and their children. Alternatively they expect support to come from the state through the social security system. Secondly work has lost its status as something one does out of necessity; work is regarded as something that should be interesting and challenging. If it is not, there is always the possibility of being unemployed. The latter goes for the young males as well as for the females.

It is clear that the changes in the girls' conception of the relation between the sexes especially with regard to children and having a family, and the change in the general attitude to work has its roots in societal relations that have changed. But these developments in the Area of Social Life, and in the fields of Basic Social Life Qualifications and of Comprehensive Social Life Qualifications also have implications for the Working Life Qualifications of the young people. Thus Simonsen's survey demonstrates several aspects of relevance to the understanding of our model. She illustrates the inter-dependence of the different areas and fields, she demonstrates that changes in social life can have implications for working life, and she shows that societal relations have a place in the model, if they are brought forward in the analytical work, as they should inevitably be. We have tried to indicate the necessity to remain analytical when using the model by calling it a Search Model, rather than just a Model.

So in spite of the individualistic appearance of the Search Model the societal context and preconditions are present in two ways. Primarily through the acting subject itself, whose subjectivity has been formed in a societal context and environment. The forming of the subject must be understood in its societal context, but not as mechanically determined by it. Secondly through the societal organization of the environment in which the subject is acting, and which forms the framework of the subject's actions. The economic organization of production in society; the relations of control and

domination both in working life and in society as a whole; relations between the sexes and family patterns. All these matters are preconditions that it is impossible for the single subject to change, but which he or she is bound to reflect and take into account, when everyday life is to be conducted.

Therefore they are also important for the question of qualification. The ability of the subject to perform certain actions, to reflect on the preconditions, let alone what possible consequenses this reflection has for the ability of the subject to function in various contexts are crucial elements of the qualifications of the subject.

It follows that the analysis of capacities and qualifications must be conducted with continuous reflection of the societal context of the practices in both childhood socialization and in the life-long socialization of adults taking place in and outside work. And it should be reflected, that this socialization is influenced by the social constitution of formal and in-formal institutions we act within (gender in this context being such an institution). Both material relations and aspects concerning culture and consciousness must be considered.

The dynamic of the Search Model therefore has to do with both the interdependence and interactions of the different areas, levels and fields, and with the dialectic relations between the subject, society and social contexts.

But then what are General Qualifications?

Through all this one might almost forget, that the starting point was General Qualification. What happened to it? How can it be discussed in a more distinct way?

Bearing the discussion of the Search Model in mind, it becomes clear that a major problem in the analysis of General Qualification is its attempt to join some qualitatively very different matters under one label. In the different uses of the term 'General Qualification' qualifications from several of the fields of qualifications have been named (e.g. from Specific Social Life Qualifications such as reading and writing, Comprehensive Social Life Qualifications such as a general knowledge and understanding of the way the society works, qualifications from all levels in the Personal Area, and from both the Comprehensive and the Basic Working Life Qualifications such as the knowledge and understanding of the organization at the labour market, or broader technical skills founded in an understanding of the context of the work).

This broad spectrum comprises qualifications very different in content as well as in the way they are inherent in the subject. They also possess very different potential for change, which becomes apparent when it comes to the educational question of how they could be subjectively developed. Much as we acknowledge the need for very superior labels in some discussions, we also recognize that the division into nine fields of qualifications as suggested in the Search Model might be impractical in some contexts. We therefore suggest three different ways of dividing the qualifications.

A crude division in two groups:

Technical Qualifications and General Qualifications

where technical qualifications relate to the specific level and parts of the comprehensive level of the Area of the Working Life.

As the next step a more sophisticated division in four:

Technical Qualifications
Qualifications of Social Life
Personal Qualifications
Qualifications of Identity

In this division the latter three groups of qualifications represent different types of general qualifications.

Finally

the nine fields of qualifications in the Search Model

which is the most appropriate distinction when it comes to a more precise reflection on which qualifications are important to possess in different context, and which conditions are to be taken into account when it comes to developing them. In this more detailed division the concept of general qualification loose its importance as a label for qualifications, as it is other logics and priorities that have defined the categories of the Search Model. At this stage we have left behind both the definition of General Qualification that is shaded by its roots in industrial sociology, and the category of left-over-qualifications.

Use of the Search Model in relation to education

The main contribution of the Search Model in relation to education (as in relation to analysis of qualification) is the priority and central position of the subject that is to possess and develop the qualifications, and the ambition to observe other aspects from this point of view. In educational planning there has been a tendency to start considerations outside the subject, e.g. in problems or aspects of production, in interests of employers or in a hazier, general social interest. The results of such traditional educational considerations have then been compared with the qualifications and characteristics of the subjects, and through a simple subtraction a need of qualification and qualifying has been formulated.

By use of the Search Model it is possible to avoid this definition of the subject as an object of external interests only. By placing the subject in the center, the dialectic between societal and external interests and influences and subjective qualities and preconditions becomes visible and accessible to analysis. This yields at least three advantages when it comes to the discussion of education, and of developing work-organization.

1. *It becomes possible to let the subject use resources that have previously been left out of sight, because they have been rooted in life areas other than that of production.*

During the past few years a number of qualification-projects have emerged, trying to deal with the question of the education of workers in a way that involves workers themselves more extensively than before (cf. Andersen et.al 1993a, chapter 4). But in actual effect there is still a tendency to let the working process define the standards and parametres, and leaving the workers to find out what they still need to fulfill the needs of production. Such an approach implies no change in basic relations between outside needs and inside qualifications. One consequence of these approaches is that a number of ressources actually possessed by workers are left out of consideration, because they do not fit into the working-process-view of qualifications (cf. Andersen 1992).

The boundary between what is usually regarded as relevant in terms of work and qualification, and what is actually relevant when it comes to the ability to do a job, is not broken down by simply letting the workers themselves formulate what they lack. It is analytically necessary to hold an external perspective that opens the view of the practices outside work. This approach should be made from the outset of any analysis.

The Search Model can be used as a support in formulating which possible qualifications could be present and relevant from a subjective point of view, as well as from an objective one.

2. *It becomes possible to take into consideration whether perhaps conditions outside the subject should be changed, rather than the subject itself.*

If you start out looking for the resources of the subject rather than the shortcomings, it might become obvious that the real blockage for developing the working process is located in the work organization itself, or in other agents in the production, e.g. superiors. Consequently the adequate process of 'qualifying' would not be to change the features and abilities of subjects, but to change the frames in which he or she is to function.

This point of view also influences the analysis of the possible effects of education. If the subject has been qualified in a certain way, but the organization of work in everyday life does not allow the subject to make use of the new qualifications, then there is a great risk that they will not remain as qualifications with the subject.

Thus the apparently individualistic Search Model may suddenly move the focus from the individual to the social frames and context and on to the societal conditions of the subject.

3. *It opens the analysis for the relation between qualifications and qualifying at an early stage. So the circumstances under which specific types of qualification could be developed are present as an important factor even in the formulation of the needs for qualifications. Also the process of qualification might be understood as an influence on qualification itself.*

Education (i.e. the qualifying) is often seen as an extrinsic device to obtain a certain qualification, without having any intrinsic relation to the qualifications actually emerging from the process. But when it comes to the qualifications usually referred to as general this is rarely the case. Such qualifications will often be developed as an effect of the *how* of the education (e.g. the pedagogical form and didactic principles), rather than an effect of the *what* (e.g. the content of the education).

Educationally speaking it is generally quite a bad idea to separate qualifying and qualifications into two independant units, but where general qualification is concerned, it is particularly devastating.

So what comes next ?

The construction of the Search Model has been the first phase in the research project concerning general qualification. The next phase comprises empirical studies in the field of qualifications, i.e. in classrooms, in staff rooms, in workplaces etc. This phase is already starting, and it is expected to be completed by autumn of 1994. After which the results and experiences of the various empirical projects will be compared and discussed in a final report to be issued in the spring of 1995. The empirical work will shed light on the strengths and weaknesses of the model. We are, however, certain that as an analytical aid, and as a reminder in the process of educational planning it will on all levels prove to be an important contribution in supporting the development of general qualification, and in understanding what is going well, wrong and why. Yet, as any other contribution its importance depends on whether or not it is actually used and discussed by the people who are in their daily work dealing with educational planning and practice. We hope it will be used and argued about.

References

Andersen, Vibeke (1992). "Er kvalifikationer noget man mangler eller noget man har?" In Ulriksen, Lars (ed). *Perspektiver på almenkvalificering. 1. delrapport fra Almenkvalificeringsprojektet.* Roskilde Universitetscenter: Erhvervs- og Voksenuddannelsesgruppen.

Andersen, Vibeke - Illeris, Knud - Kjærsgaard, Christian - Larsen, Kirsten - Olesen, Henning Salling - Ulriksen, Lars (1993a). *Kvalifikationer og levende mennesker. 2. delrapport fra Almenkvalificeringsprojektet.* Roskilde Universitetscenter: Erhvervs- og Voksenuddannelsesgruppen.

Andersen, Vibeke - Illeris, Knud - Kjærsgaard, Christian - Larsen, Kirsten - Olesen, Henning Salling - Ulriksen, Lars (1993b). *Kvalifikationer. En søgemodel. 3. delrapport fra Almenkvalificeringsprojektet.* Roskilde Universitetscenter: Erhvervs- og Voksenuddannelsesgruppen.

Baethge, Martin - Oberbeck, Herbert (1986). *Zukunft der Angestellten.* Frankfurt a. M.: Campus Verlag.

Becker-Schmidt, Regine - Brandes-Erlhoff, Uta - Karrer, Marva - Knapp, G. Axeli - Rumpf, Mechthild - Schmidt, Beate (1982). *Nicht wir haben die Minuten - die Minuten haben uns.* Bonn:Verlag Neue Gesellschaft.

Directorate for Adult Vocational Training Programmes (1988). *Almene Kvalifikationer og uddannelsesmæssige konsekvenser inden for specialarbejderuddannelsen.* Copenhagen: AMU-direktoratet.

Drexel, Ingrid - Nuber, Christoph (1979). *Qualifizierung für Industriearbeit im Umbruch.* Frankfurt a. M./New York: Campus Verlag.

Illeris, Knud (1992). "General Qualification of Unskilled and Semi-skilled Workers" in Gam, Peter et.al. (eds.). *Social Change and Adult Education Research. Adult Education Research in Nordic Countries 1990/91.* Linköping.

Kern, Horst - Schumann, Michael (1970). *Industriearbeit und Arbeiterbewußtsein.* Frankfurt a. M.: Europäische Verlagsanstalt.

Mickler, Ottfried - Dittrich, Eckhard - Neumann, Uwe (1976). *Technik, Arbeitsorganisation und Arbeit.* Frankfurt a. M.: Aspekte Verlag.

Morgenroth, Christine (1990). *Sprachlose Widerstand.* Frankfurt a. M.: Fischer Taschenbuch.

Projektgruppe Automation und Qualifikation (1987). *Widersprüche der Automationsarbeit.* Berlin: Argument Verlag.

Simonsen, Birgitte (1993). *Unget forhold til arbejdsliv og forsørgelse. Rapport 2 fra projektet Konsekvenser af det husmorløse samfund.* Roskilde Universitetscenter: Erhvervs- og Voksenuddannelsesgruppen.

Volmerg, Birgit - Senghaas-Knobloch, Eva - Leithäuser, Thomas (1986). *Betriebliche Lebenswelt.* Opladen: Westdeutscher Verlag.

LEARNING PROCESSES

Working Together: Motivation, Goals and Volition

Tove Dahl

Department of Psychology
University of Tromsø

Abstract

Two studies were conducted in which students in school environments that were more performance oriented (high schools) were compared with students in school environments that were more mastery oriented (folk high schools). The first comparison examined contextual effects first on the nature of student achievement goals and then on the nature of student goals in general. The second comparison looked at the kind of motivational volition students reported in relation to their achievement goals. Results indicated that students in environments that were more performance oriented had a greater propensity for adopting performance-oriented goals, and students in environments that were more mastery oriented had a greater propensity for adopting mastery-oriented goals. However, students in the more mastery oriented environments showed less volition than the other students, and reportedly regarded academic goals as less important than the other students. Differences were also found in how much students and teachers at the same school valued both academic and non-academic goals. The import of these differences for volition and goal attainment is discussed.

Introduction

Henry Ford once said, "Getting together is a start. Staying together is progress. Working together is success." In any classroom situation you have a learned person responsible for sharing knowledge, and you have a learning person responsible for acquiring knowledge. To paraphrase Henry Ford, getting the two together is a start. Staying together and aiming for particular destinations is progress, and moving actively together towards those destinations is success. Therein lies the essence of motivation, goals and volition, three different but closely related parts of the learning process.

Motivation is critical for setting sites, goals are the sites themselves, and volition is the fuel that moves us towards them.

Motivation, Goals and Volition

Recent work done at the Norwegian Institute of Adult Education (NVI) looked at the relationship among these variables with adults in different learning environments. I was curious about the ways in which different environments point students towards different learning destinations and the ways in which different students then move towards them. The fact that learning environments can help students set goals which point them towards qualitatively different learning destinations is a powerful concept. It is all the more powerful when environments are structured to help students make the leap from pointing in the right direction to actually moving in that direction. The questions we need to answer as educators in order to rightfully use this powerful concept are 1) Is direction sufficient for action?, and 2) What *is* the right direction? To answer both questions, we need to get a sense of motivations that inspire goal setting, the nature of goals themselves, and the essence of volition.

In research rooted in the German theory of action control, motivation and volition are seen as related but different aspects of thinking, feeling and acting (Heckhausen, 1980 and Kuhl, 1984 as referenced in Corno, 1993). This theory describes motivation as a *pre*decisional analysis that involves thinking about and committing oneself to particular goals before making the actual decision to act. It describes volition as a *post*decisional response that involves enacting intended goals by enlisting whatever psychological, emotional and behavioral tools are needed to implement them. Although considerable research has been done to lay the groundwork for this framework, it is still not well understood how students in different environments use and maintain motivation, goals and volition. Furthermore, the movement from motivation and goals to volition is a movement that Corno (1993) regards as no less trivial than crossing the Rubicon River.

As a mediating variable, goals serve as the important middle ground that is defined by motivation and that subsequently defines potential volition. Several classroom researchers over the past decade have worked to provide a relatively narrow but rich explanation of different types of learning goals (e.g. Ames, 1990, 1992; Ames & Ames, 1984; Ames & Archer, 1988; Blumenfeld, 1992; Covington & Omelich, 1984; Dweck & Leggett, 1988; Elliott & Dweck, 1988; Meece, 1991; Meece, Blumenfeld & Hoyle, 1988;

Nicholls, 1984). From their efforts has come a relatively clear picture that falls under the umbrella of achievement goal theory. In achievement goal theory, some of the personal and contextual variables that seem to influence student adoption of particular types of learning goals have been unpacked. In the process, researchers have identified distinct patterns of thoughts, feelings and behaviors that tend to accompany different types of goals. The goals that have been of particular interest in this body of research are achievement goals that set sites on more mastery-oriented learning (mastery goals) and achievement goals that set sites on more performance-oriented learning (performance goals).[1]

In a recent summary of the literature, Ames (1992) describes the *mastery goal orientation* as one focused on the intrinsic value of learning. For students with this orientation it is important to improve and grow for the sake of satisfying their own interests. Students with mastery goal orientations view effort and ability as independent factors such that the glitches and stops that typically go along with learning and which demand the effort of rethinking or repair are regarded as a natural and acceptable part of the process. Therefore, students with mastery goal orientations tend to report relatively high self-efficacy for learning, enjoy challenges and risk-taking, have positive attitudes towards learning, use the time they need to successfully master content (even when they find it difficult), and use effective learning strategies. As a result, the kind of learning that this mastery goal orientation invites is generally of solid quality.

On the other hand, Ames describes the *performance goal orientation* as one focused more on the extrinsic value of learning. For students with this orientation it is important to perform sufficiently well to satisfy others' interests. Students with performance goal orientations view effort and ability as related factors. When students achieve success with little effort they feel that it reflects considerable ability. Conversely, when they achieve success with considerable effort they feel that it reflects little ability. Therefore, the same effort-provoking glitches and stops that seem inconsequential to students with mastery goal orientations can seem rather threatening to students with performance goal orientations. In light of this foundation, students with performance goal orientations do fine when they are relatively successful at doing the work they are asked to do. However, in the face of challenges they tend to report relatively low self-efficacy for learning, shy away from risk, devote little time to working with content, and use relatively superficial learning strategies. As a result, the kind of learning that this performance goal orientation invites is generally of poor or superficial quality.

In the interest of higher quality learning, considerable energy has been spent on examining the manner in which learning contexts can invite more certain adoption of mastery-oriented goals. A much discussed taxonomy of variables that reportedly influence the adoption of different achievement goals is based on classroom structures (Epstein, 1989). In this taxonomy, the critical variables are the structure of classroom tasks, authority, rewards, groupings, evaluation and time. Ames (1992) argues that mastery-oriented goals are more likely to be adopted where at least a subset of Epstein's structures are attended to. Specifically, the adoption of mastery oriented goals is more likely when students have meaningful and varied learning tasks (tasks), opportunities to share responsibility for learning and authority in the classroom (authority), and private evaluation that encourages improvement and mastery (evaluation). Implied in this argument is the notion that performance-oriented goals are more likely to be adopted when tasks have little meaning for students, when students are given a passive rather than an active role as learners and classmates, and when evaluation is public and based on normed or standardized progress rather than individual growth.

This kind of argumentation gives teachers concrete ideas to use when aiming to create learning environments that foster one kind of achievement goal orientation over another (Ames, 1990). But is a particular type of goal orientation both necessary and sufficient to actually elicit the kinds of thoughts, feelings and behaviors which then lead to particular kinds of learning? Research done at NVI supports a growing body of literature that suggests that it is not. Why? Because: 1) there is a critical difference between a students' achievement goal orientation and volition, and 2) in any given learning situation students may find achievement goals more or less important in light of other things of interest in their environment.

About the Subjects

The data used in the NVI research was collected in one of two types of schools -- high schools (both standard high schools and high schools for adults) and folk high schools. The schools were selected because of their adult clientele and because of the institutional presence and absence of key variables that Ames (1992) claims can influence the adoption of mastery and performance goal orientations.

At high schools, for example, learning activities are motivated by a required curriculum (task), teachers and administrators are given primary responsibility for making decisions about how the curriculum will be

mastered (authority), and student performance is ultimately evaluated in terms of normed and standardized exams (evaluation). In addition, there is a set amount of time for mastering the predetermined curriculum (time), and student achievement is directly related to advancement (*Curriculum Standards for High School*, 1976). At folk high schools, on the other hand, there is no set curriculum such that there is considerable freedom to design tasks that are varied and meaningful (task), students and teachers share responsibility both for the curriculum they cover and the student role in covering it (authority), and student performance is not evaluated in any normed or standardized way (evaluation). Likewise, how much time students and teachers spend on any given topic is relatively flexible (time), there is no formal link between performance and advancement, and learning is considered a process that is encouraged both within and beyond the classroom (*The Competence Question in the Folk High School*, 1990; *The Folk High School in Norway*, 1991; Hård, 1992, 1993). As Lyn Corno (1993) has so aptly put it "education develops not only what it demands but also what it invites" (p. 17). Therefore, the high school environment should afford students a greater opportunity to adopt performance goal orientations whereas the folk high school environment should afford students a greater opportunity to adopt more mastery goal orientations.

Is direction sufficient for action?

The purpose of the first study was to document the kinds of learning goals that students set as viewed from the perspective of the type of school students attend and the age of the students attending them (Dahl, 1992). Based on answers to open-ended questions about student learning goals within a particular course, both across school differences and within school differences were found. Based on the responses that clearly indicated a particular type of goal (ca. 85% of all responses), all folk high school students reported operating with mastery oriented goals. Furthermore, substantially more folk high school students reported operating with mastery oriented goals than teenage high school students (56%) and adult high school students (75%). When looking at the high school students by themselves, more adult students reported operating with mastery oriented goals than their teenage peers.

But were achievement goals enough for students to actually engage a type of volitional disposition that sustains an appropriate motivational climate? To answer this question, the Motivated Strategies for Learning Questionnaire was used (Pintrich, Smith, Garcia & McKeachie, 1991; translated into Norwegian by Dahl, Madsen & Rønning, 1991). The questionnaire subscales

used in this study were selected to monitor student reports of their motivated values, expectancies and to some extent actions within the course they were taking. In other words, the subscales were selected to monitor student volitional dispositions.[2] In particular, the Motivated Strategies for Learning Questionnaire subscales summarized 1) how much the students were oriented towards intrinsic goals, 2) how much they were oriented towards extrinsic goals, 3) how much they valued the tasks in the course they were attending, 4) how much control they felt over their learning outcomes, 5) how much self-efficacy they felt for learning and performance, 6) how much they engaged in metacognitive self-regulation, and 7) how much they engaged in effort regulation.

As expected, folk high school students reported being less oriented towards extrinsic goals than both teenage and adult high school students, and more oriented towards intrinsic goals than teenage high school students. However, the folk high school students otherwise scored lower than both groups of high school students on the remaining scales. The two high school student groups varied some, although not substantially so. Together these findings suggest that although folk high school students point themselves in a positive direction learning-wise through their achievement goals, folk high school students do not tend to engage in thoughts and behaviors that one would expect necessary to actually move towards their goal as much as high school students. In other words, students at all schools were fairly adept at the motivational process of deciding on and articulating achievement goals, however they differed in the degree of volition they reported behind their goals.

Given how powerful self-efficacy or student belief in their ability to successfully manage a learning situation has been shown to be for student volition (e.g. Bandura, 1982, 1986; Pintrich & DeGroot, 1990; Schunk, 1989), two measures of self-efficacy were used to check if the differences between the students at the different schools could be attributed to their efficacy beliefs. As it turned out, no significant differences were found between the two student groups, suggesting that the volitional differences at the two types of schools were influenced by variables other than self-efficacy.

From the perspective of achievement goal research, it was encouraging to have it confirmed that the school environment that seemed more likely to invite more mastery oriented goals did so. However, it was disappointing that the context and orientation were not enough to ensure volition. This particular study then suggests that a particular type of goal orientation and concommitant level of self-efficacy may be *necessary* to invoke particular

patterns of learning-relevant thoughts, feelings and behaviors, but not *sufficient*.

This insufficiency could stem from how students themselves prioritize achievement goals over other types of goals. Given the less authoritative nature of the academic program at the folk high school, folk high school students may have shown lower volitional dispositions for learning in response to competition from other interests. After all, where context and tasks are ill-defined, students tend to impose their own structure and goals (Pintrich, Marx & Boyle, 1993). Therefore, in order to see what kinds of interests students care about pursuing, especially within environments that have already been shown to invite different types of achievement goals, the second study took a more careful look at the context-specific kinds of interests that might compete with achievement goals for volitional attention and energy.

What is the right direction?

Because of the kinds of issues that nag at researchers when doing relatively narrow studies of goals, more and more of them are choosing to take a step back to seek a broader sense of the rich and varied context within which all school learning occurs. This adjusted focus calls into question the validity of the limited view achievement oriented goals provide us of total student motivation (Ford & Nichols, 1991; Nicholls, Patashnick, Cheung, Thorkildsen & Lauer, 1989). Interpersonal competence, academic competence as well as non-academic personal competence are all important factors in the classroom (Dodge, Asher & Parkhurst, 1989; Wentzel, 1991, 1993). It therefore seems natural that these other kinds of competencies should be considered as fodder for motivation, goals and volition. If, indeed, "the forms of information processing associated with volition in schooling function to protect and maintain students' 'best-laid plans' for accomplishing academic goals in the face of competing ... goals and other distractions" (Corno, 1993, p. 15), then this warrants closer investigation.

When competing variables fight for student attention and action, goals become vulnerable to attentional shifts, modifications, or outright abandonment. In order to preserve the prominence of a particular goal, that goal requires protection and maintenance. Some of this protection and maintenance can be advanced or constrained by the individual (Corno, 1993; Corno & Kanfer, 1993; Zimmerman, 1989; Zimmerman & Martinez-Pons, 1990), and some can be advanced or constrained by the situation (Ames 1990, 1992; Epstein, 1989).

Ideally, goal protection and maintenance is best advanced through a strategic negotiation among all relevant parties in any given learning situation (Zimmerman, 1990; Zimmerman, Bandura & Martinez-Pons, 1992). The value of such negotiations lies in cooperation. Through cooperation students and teachers together "alter... goals in minute but perceptible ways, and broaden... the means of attainment" (Corno, 1993, p. 16). In so doing, argues Corno, students feel heard and, if successful, the nature of student involvement moves from compliance to volition. But of course, in order to understand the outcome of such negotiations, one has to first understand what it is that is being negotiated. Therein lies the stuff that this second study was made of.

In this second study, students were asked to list all of the qualities that they felt were important for student success at their school (see Dahl, 1993a, 1993b). The purpose of this was to get at students' implicit theories about what it takes to succeed in their different school environments.[3] Not surprisingly, the categories of responses that emerged included both academic and non-academic competencies. The academic competencies were knowledge (the amount and kind of knowledge students have and the ease with which they acquire and use it), school savvy (skill at using academic skills and meeting school demands successfully) and motivation (positive attitudes about learning, goal-minded and volition). The non-academic competencies were personal qualities (general personality features such as pleasantness and balance), consideration of others (interest in and compassion for others), self-strength (self-discipline and maturity) and other interests (affinities for non-school activities). All of these competencies were salient to at least some of the students at both schools, with at least half of the high school students mentioning school savvy, motivation and consideration of others as salient student competencies and at least half of the folk high school students mentioning knowledge, school savvy, motivation, and personal qualities as salient student competencies. Students found the need for motivation significantly more salient in the high schools, and students found the need for knowledge and personal qualities significantly more salient in the folk high schools.

But *salience does not necessarily imply importance*. Therefore, the students were later asked to indicate how important they found each of these competencies for their own school performance (see Dahl, 1993b). School differences were found in both academic and non-academic domains, although they were not as marked as expected in the non-academic domain. In the academic domain, the high school students and folk high school students differed in how important they regarded knowledge and motivation, with the high school students regarding both competencies as more impor-

tant. There was no signficant difference between schools in terms of school savvy. In the non-academic domain, the high school students and folk high school students differed only in terms of concern for others, with the folk high school students regarding this competency as more important. There were no signficant differences between schools in terms of personal qualities, personal strength and outside interests.

Still, *importance does not necessarily imply motivation and volition*. Therefore, the students were also asked to indicate if they had progressed in any of these competencies over the course of the year, and if so, how much. There was considerable variance in the growth reported, although the overwhelming majority of the students indicated some growth in all of the competencies, thereby implying some, albeit varying, degrees of motivation and volition from student to student and from school to school.

Given the range of competencies that the students indicated as important for their success and in which they apparently invested some energy, the singularity of achievement goals becomes suspect. Also, the sweeping claims about the power of achievement goals is curious. True, the range of competencies mentioned affirm that achievement goal orientations may be necessary for eliciting particular kinds of motivated patterns of thought and behavior that support growth in student-valued academic competencies. However, the range of competencies that students express as important to them also underscores the need for goal negotiation in order to optimally translate achievement goals into sufficiently sustained volition.

I originally posed learning as a two-way street between the learning person and the learned. This picture could therefore not be complete without a sense of how teachers regard the student competencies which students found so important. This has import because where there is inequity among student and teacher views, goal negotiation could help reduce student compliance (given what I call student-teacher goal discordance) and help increase student volition (given what I call student-teacher goal harmony) (McCaslin & Good, 1992).

At the high schools, goal harmony existed only in 2 of the 7 the competencies, school savvy (of relatively low value) and self-strength (of relatively low value). At the folk high schools, goal harmony existed only in 2 of the 7 competencies: concern for others (of relatively high value) and outside interests (of relatively low value). These findings suggest that the agenda to be negotiated among teachers and students varies somewhat by school.

Clearly, students and teachers at both types of schools need to evaluate the degree to which they value and prioritize each and every competency in order to lay a firm foundation for volition and success. Through negotiation they may be able to achieve goal harmony in the domains where there originally was discordance. Once goal harmony is reached, the teacher is allowed to focus on the task of maintaining motivation and volition (status quo). Although the task of maintaining status quo may seem the ideal, I must nevertheless add two words of caution.

Caution number one: Although goal harmony may create a positive foundation for learning, the level of goal harmony may not always be adaptive for actual learning. An example of this appeared in the high school material in which school savvy was judged to be relatively unimportant for both students and teachers. Since school savvy has been demonstrated to be one of the key variables in the sucessful translation of motivation into volition, this finding is problematic (e.g. Corno & Kanfer, 1993; Pintrich & DeGroot, 1990; Zimmerman, 1989).

Caution number two: Although goal discordance may be less desirable for volition, it may not always be possible to immediately resolve discordance. In negotiations, discordance may involve increasing the value either students *or* teachers feel for a particular competency. An example of an area where students may need to raise their value of a particular competency appeared in both the high school and folk high school material in which motivation was judged to be relatively unimportant by students and relatively important by teachers. In a case like this where negotiations may support striving for the teacher-held value of a particular competency, the job of the teacher should focus on instilling motivation and volition in the students (McCaslin & Good, 1992). An example of an area where teachers may need to raise their value of a particular competency appeared in the folk high school material in which self-strength was judged to be relatively important by students and relatively unimportant by teachers. In a case like this where negotiations may support striving for the student-held value of a particular competency, the job of the teacher should focus on instilling motivation and volition in themselves.

The key to instilling motivation lies in building a framework which supports internalization of the discordant goal by reminding the person of the goal's intrinsic value. This can be done through highlighting the goal's personal relevance as a learning enhancer rather than a learning distraction. With the proper skills and good self-sustaining systems in place, teachers and students can then move towards internalizing the goal and the pursuing it as their own. We know that there is considerable extra effort involved in instilling

motivation and volition, and that internalized goals have significant import for achieving goal harmony. Therefore, establishing frameworks to resolve goal discordance should only be considered after the teacher has reflected on the goal's import for the student needs and abilities, for the teacher's needs and abilities and for the general demands of the situation. Otherwise the teacher and student efforts can be wasted and meaningless.

Working Together

This article began by posing two questions about learning. Is direction sufficient for action, and what is the right direction? The answers arrived at in the NVI research suggested that direction is not sufficient and that the right direction is a matter of perspective and motivation. It also calls into question the generalized applicability of achievement goal theory as it stands today. In order to turn learning goals into volition, goal harmony may provide a firmer foundation than goal discordance. The relative payback of goal harmony and relative drawbacks of goal discordance for actual learning is not within the scope of these studies, but it is definitely an area worthy of further pursuit. Questions that can be asked down the line include: What does the relative importance of goal harmony in different areas of competance mean for actual learning? Does goal discordance in some competencies matter less for learning than goal discordance in others? Are there ways to structure learning environments in order to accentuate the salience of certain competencies and deemphasize the salience of others in a manner fitting for different learning contexts?

The reason for posing these questions comes back to what Henry Ford said. When students come to learn, they have a start. However, when students drop out they cannot progress, and when students remain passive during the learning process, they cannot succeed. In order to minimize dropping out and to increase success, paying attention to goal harmony and discordance may play a useful role in helping translate motivation into goals and goals into volition. By working together, students, teachers and education may increase their chances of succeeding together.

Notes

1. Although there is no firm concensus on the names of these types of goals, the nature of the two types of goals by whatever name is strikingly constant.

2. For more information about the subscales themselves and the rationale behind their selection, see Dahl (1992) and Dahl (1993a).

3. Note that no teenage subjects were used in this second study. Rather, the subjects in this study were either adult students attending high schools especially for adults or folk high school students (see Dahl, 1993b).

References

Ames, C. (1990). Motivation: What teachers need to know. *Teachers College Record, 91*, 409-421.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. Journal of Educational Psychology, 84, 261-271.

Ames, C. & Ames, R. (1984). Systems of student and teacher motivation: Toward a qualitative definition. *Journal of Educational Psychology, 76*, 535-556.

Ames, C. & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology, 80*, 260-267.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist, 37*, 122-147.

Bandura, A. (1986). Conclusion: Reflections on nonability determinants of competence. In R. J. Sternberg & J. Kolligian (Eds.) *Competence Considered* (pp. 315-362). New Haven, CT: Yale University Press.

Blumenfeld, P. (1992). Classroom learning and motivation: Clarifying and expanding goal theory. *Journal of Educational Psychology, 84*, 272-281.

The Competence Question in Folk High Schools (*Kompetansespørsmålet i folkehøgskolen*), (1990). Oslo, Norway: Ministry of Church, Education and Research.

Corno, L. (1993). The best-laid plans: Modern conceptions of volition and educational research. *Educational Researcher, 22*, 14-22.

Corno, L. & Kanfer, R. (1993). The role of volition in learning and performance. In L. Darling-Hammond (Ed.) *Review of Research in Education, Vol. 19*, (pp. 301-342). Washington, DC: American Educational Research Association.

Covington, M. V. & Omelich, C. L. (1984). Task-oriented versus competitive learning structures: Motivational and performance consequences. *Journal of Educational Psychology, 76*, 1038-1050.

Curriculum standards for high school (*Læreplan for den videregående skole*) (1976). Oslo, Norway: Ministry of Church and Cyldendal Publishers.

Dahl, T. (1992). *Hvilken rolle spiller alder og kontekst i elevers innstilling til læring?* (*What role do age and context play in students' dispositions for learning?*) Trondheim, Norway: Norwegian Institute of Adult Education.

Dahl, T. (1993a, March). Does motivation for learning differ among students attending high schools and folk high schools? Paper presented at the 21st Congress of the Nordic Society for Educational Research, Linköping, Sweden.

Dahl, T. (1993b). *Enhancing motivation and competence with goal harmony: A comparative analysis of students and teachers in performance and mastery oriented schools.* Trondheim, Norway: Norwegian Institute of Adult Education.

Dodge, K., Asher, S. & Parkhurst, J. (1989). Social life as a goal-coordination task. In C. Ames & R. Ames (Eds.) *Research on motivation in education* (Volume 3, pp. 107-135). San Diego: Academic Press, Inc.

Dweck, C. S. & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review, 95*, 256-273.

Elliott, E. S. & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology, 54*, 5-12.

Epstein, J. (1989). Family structures and student motivation: A developmental perspective. In C. Ames & R. Ames (Eds.) *Research on motivation in education* (Volume 3, pp. 259-295). San Diego: Academic Press, Inc.

The Folk High School in Norway (*Folkehøgskolen i Norge*). (1991). Oslo, Norway: The Information Office for Folk High Schools and The Information Office for Christian Folk High Schools.

Ford, M. & Nichols, C. (1991). Using goal assessments to identify motivational patterns and facilitate behavioral regulation and achievement. In M. Maehr & P. Pintrich (Eds.) *Advances in motivation and achievement* (Volume 7, pp. 51-84). London: JAI Press, Inc.

Hård, H. S. (1992). *Informal learning: A study of learning at Swedish folk high schools* (*Informellt lärande: En studie av lärprocesser i folkhögskolemiljö*). Linköping, Sweden: Linköping University.

Hård, H. S. (1993). Informal learning. In P. Gam, S. Tøsse, J. Tuomisto, M. Klasson & B. Wahlgren (Eds.) *Social Change and Adult Educational Research* (pp. 209-219). Copenhagen: Nordic Council of Ministers et al.

McCaslin, M. & Good, T. L. (1992). Compliant cognition: The misalliance of management and instructional goals in current school reform. *Educational Researcher, 21*, 4-17.

Meece, J. (1991). The classroom context and children's motivational goals. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (Volume 7, pp. 261-286). Greenwich, CT: JAI Press.

Meece, J., Blumenfeld, P. & Hoyle, R. (1988). Students' goal orientations and cognitive engagement in classroom activities. *Journal of Educational Psychology, 80*, 514-523.

Nicholls, J. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review, 91*, 328-346.

Nicholls, J., Patashnick, M., Cheung, P., Thorkildsen, T. & Lauer, J. (1989). Can achievement motivation theory succeed with only one conception of success? In F. Halisch & J. van den Bercken *International perspectives on achievement and task motivation* (pp. 187-208). Amsterdam: Swets & Zeitlinger B.V.

Pintrich, P. & DeGroot, E. (1990). Motivational and self-regulated learning components of classroom academic performance. *Educational Psychology, 1*, 33-40.

Pintrich, P. R., Marx, R. W. & Boyle, R. A. (1993). Beyond cold conceptual change: The role of motivational beliefs and classroom contextual factors in the process of conceptual change. *Review of Educational Research, 63*, 167-199.

Pintrich, P., Smith, D. F., Garcia, T., & McKeachie, W. (1991). *A manual for the use of the Motivated Strategies for Learning Questionnaire (MSLQ)* (Technical Report No. 91-B-004) (T. Dahl, B. E. Madsen & W. Rønning, Trans). Ann Arbor, MI: The Regents of the University of Michigan.

Schunk, D. (1989). Self-efficacy and cognitive skill learning. In C. Ames & R. Ames (Eds.) *Research on Motivation in Education* (pp. 13-44). San Diego: Academic Press.

Wentzel, K. (1991). Social and academic goals at school: Motivation and achievement in context. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (Volume 7, pp. 185-212). Greenwich, CT: JAI Press.

Wentzel, K. (1993). Does being good make the grade? Social behavior and academic competence in middle school. *Journal of Educational Psychology, 85*, 357-364.

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology, 81*, 329-339.

Zimmerman, B. J., Bandura, A. & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal, 29*, 663-676.

Zimmerman, B. J. & Martinez-Pons, M. (1990). Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. *Journal of Educational Psychology, 82*, 51-59.

The Relationship between Work and the Learning Process in Adult Education

Steen Høyrup and Camilla Scavenius

Research Centre of Adult Education
The Royal Danish School of Educational Studies

Abstract

The article discusses the content and form in continuing education. The discussion will attach special importance to the connection between education of the workforce and the development in some Danish municipalities.

The article is based on a research among seven different courses for people in work. The seven courses are very different, but they do have one thing in common: All of them are experimental in either their content and form or in the way the course is organized. The article will examine advantages and disadvantages connected with the different courses.

Among other things the article will argue that it is necessary to take the participants' immediate superior into consideration when planning the course - if not, the learning process will very often stop as soon as the participants return to their jobs.[1]

Background

In the last decade profound chances has been going on within the public authorities in Denmark.

---

[1] The article was presented at the ESREA Seminar on Research into Adult Education and the Labour Market, Ljubljana, Slovenia 10. - 12. oktober 1993.

The public sector has been criticized for being too big, too expensive and too bureaucratic. It has been said that it is ineffective and not flexible enough. For years it has lived a life of it´s own, by it´s own rules in it´s own very closed organization.

The public authorities have to bee more service-orientated in order to live up to the demands of today´s society. Therefore the relationship between public authority and the citizens has been brought into focus.

Parallel with this development the demand for continuing education has arisen immensely. And in addition to that there is a big demand for developing new forms of continuing education.

Continuing education has got a new status: Learning is no longer seen primarily as an individual matter - education is regarded as an important precondition for a successful development in the public sector. In short: continuing education is the most important tool in employee policy in the nineties.

Being the public authorities´ face to the outside world the personnel with a short educational background play an important role in modernizing the public sector. And consequently there is a demand for educational research and innovation within continuing education for especially employee with a short educational background.

In general outlines this development has taken place in all the Nordic countries. In Norway, for instance, one speaks of a development going from an administration culture to a service culture.

The article is to be read in light of this development.

New Methods in Continuing Education

The article is based on a research into seven different projects within continuing education in Danish municipalities. The research is conducted by Research Centre for Adult Education in association with the Committee of Continuing Education within the National Association of Local Authorises in Denmark (Kommunernes efteruddannelses Udvalg under Kommunernes Landsforening).

The research is based on results from questionnaires covering all the participants at the projects as well as interviews with teachers, educational advisers, union representatives and representatives among the participants.

The seven projects have persons with a short educational background as their target group, and all of the projects are breaking new grounds being experimental in either form or content.

The projects chosen for the research all serve the following purposes:

- to give back the will to learn to employees who have got bad experiences with the school system and no motivation to learn

- to encourage learning styles that promote the benefit from the courses

- to give ideas to educational methods in adult education.

The following personnel groups are represented in the research: employees within the health service, cleaning staff, home helpers, administrative personnel and assistant kindergarten teachers.

This article will concentrate on the questions: How does the in-service training apply to the job? Will the participants be able to use what they have learned when they return to their place of work?

Continuing Education - Part of the Municipal Development?

As previous mentioned, continuing education is often seen as a tool in the hands of a development process.

The qualifications needed are to some extent vocational qualifications (e.g. specific knowledge within a computer system). But what is most essential is for each participant to gain general and personal qualifications - e.g. the ability to communicate and cooperate with colleagues, analytical abilities, creativity, independence, self-confidence, responsibility, flexibility etc.

The training programmes mostly consist of a combination of vocational and general qualifications with special emphasis on the general qualifications.

The municipalities send their employees of to continuing education expecting that the participants will push the desired development forward when returning from the courses with new knowledge and inspiration.

But reality is often different. The place of work seldom distinguish between the qualifications needed in the municipality and the need for supplementary training of the workforce. Whereas the participants do not see this connection between work and education very clearly. When asking the participants what they thought was the purpose of the course we were often met with comments like:

I am not quite sure, but I think the trade union has got something to do with it
or
I really don't know - perhaps they had some money left for educational purposes.

As a rule-of-thumb the more the course was aiming to give general and personal qualifications the harder it was for the participants to see the connection to the work situation.

The conclusion so far is therefore that the connection between work and continuing education mainly exists within the higher levels of the educational system. And that this is especially true as far as general and personal qualifications are concerned.

Teaching Methods in Continuing Education

In the research we distinguish between three different types of training programmes:

- continuing education which attaches importance to vocational qualifications
- continuing education which aims to change attitudes
- continuing education which attaches importance to the general and personal qualifications.

In the first type we find mostly instructional teaching methods. In the second and third type we find learning styles which are more process-orientated: Often the courses are based on projects which - in the

main - are chosen by the participants themselves. This makes it possible to utilize the participants' own experiences and abilities.

The actual work with the projects usually takes place within minor groups. During this process each group works rather independently using the teacher as their consultant.

The learning style in these courses are often based on the principal of learning-by-doing, and as a consequence of that the education often obtains a close connection between practical and theoretical work.

Resistance to Learning

Speaking of resistance to learning educational research sometimes uses the term Matthew´s Effect: the ones who have already got a higher education do not hesitate when offered more education, whereas resistance to learning is often found among the ones with a short educational background.

This research however, indicates that the problem might be less predominant than expected. The participants from the research all have a short educational background. Still the vast majority of them have a positive attitude towards the courses in question and towards continuing education in general.

A considerable proportion of the participants state that attending the course has changed their attitude towards continuing education in a positive direction.

This taken into consideration the research project suggests that (at least) the following teaching methods prove successful in reducing resistance to learning:

- The curriculum subject is no longer there for its own sake. Instead the content of the courses are determined by the over-all purpose of the course. One could say that the learning process takes place while teaching *with* the subject - as opposed to teaching *in* the subject.

- During the courses the participants experience again and again that they gain small victories because they accomplish to find solutions to the problems they are working with. This feeling of overcoming difficulties and thereby conquering one´s own weaknesses will inevitably weaken the previous experiences of being defeated in the school system.

- The fact that the courses are based on a very close connection between theory and praxis makes it easier for the participants to see the direct use of what they learn.

- The problem- and project-orientated learning styles have proven successful with this target group.

- The learning setting gives the participants a reassuring feeling. Partly because the social aspect plays a key role, and partly because the physical surroundings do not revive memories of the traditional school class. On the contrary, the physical surroundings are often arranged according to the project of the course. In other words: an alternative learning setting is created - a setting which typically has more in common with the place of work than with the traditional school class.

The teaching methods mentioned above have this in common that the education takes place in a way that does not remind the participants of the school-situation they know from when they were kids - a situation which often brings back memories of defeat.

On the Job Learning

A close connection between education and work can be sought in several ways. This research points to the fact that good results can be obtained using in-plant training.

The connection between education and work can become closer by means of:

- letting the participants shift between educational periods and periods of work. This structure makes it possible for the participants to try their newly achieved knowledge in practice and in a familiar situation

- letting the participants stay at their place of work during the whole course. That is to say the education has to move into where the participant are - not the other way around

- putting together a class where some of the participants know each other beforehand

- using internal teachers who will have a good feeling for what kind of knowledge is needed for the group of participants in question

- working with subjects and projects in such a way that the everyday working process is never far away.

Returning to the Place of Work

Seen from an educational point of view even the best courses in the research have a weak spot in their ability to be used at the place of work.

The problem arises partly because the participants take part in two different social systems: An educational system where you are together with the primary purpose to learn and where the teacher is in charge. And a work environment where you are together with the primary purpose to work. Add to this that the work environment is only an element in a more comprehensive system where the management is carried out at different levels.

It is in the interaction between these two systems the implementation problem arises. It is difficult to transfer knowledge and bring it into action because the two systems often are too far apart and know too little about one another.

Belonging to the educational system the teacher, for instance, is seldom in a position where he can keep a close contact to participants´ work environment.

It will come as no surprise that when the participants return to their place of work things are usually very much the same as when they left for the course.

When planning the supplementary training the municipalities usually have great expectations of the future development. But when it comes to the point the ideas are often considerably ahead of the actual development leaving very little room for the participants to actually use their newly achieved knowledge.

Some of the explanation to the apparent unwillingness to changes can be found among the participants´ immediate superiors who are very likely to see their fellow colleagues as a threat to their own job. The participants´ new qualifications become a threat and will therefore often be oppressed.

One of the participants describes the situation like this:

When we just returned from the course we were in high spirits, had a lot of energy and a strong will to change things. This enthusiastic atmosphere lasted exactly two coffee breaks then everything was back to normal again.

Implementation Problems

The problems concerning implementation are very difficult to solve. Below we will put forward three elements which have an influence on the implementation problems:

- It is important that the work is organized in a way that makes room for the employees to structure their own work - and that way giving them the possibility to use their newly acquired qualifications.

- It is important that the participants get some support from their colleagues when they return to their place of work. In practice this means that the participants´ immediate superior and colleagues become part of the educational process. Being informed and interested in the education they will be inclined to meet the participants with an open mind.

- It is important that the management at the place of work has got the ability to handle the complicated situation of managing the work and at the same time creating a setting where the learning process can continue at the place of work.

Conclusion

Taking the management´s viewpoint our conclusion is that one of the most important obstacles to overcome has got to do with how to implement what has been learned. In our opinion this fundamental educational question plays a far more important role today than that of resistance to learning (which has preciously been considered one of the main problems).

In our point of view the actual success of continuing education depends as much on how effective the participants´ qualifications can be brought into action as on what has actually been learned.

Therefore it is necessary to work systematically with the question of implementation. It is not enough only to see implementation as something

that preferably follows the courses. It has to be an important built-in part of continuing education.

References

Bach, Henning Bjerregård (1988). *Deltagelse i efteruddannelse - omfang og fordeling.* Socialforskningsinstituttet.

Dalin, Åke (1987). *Kompetenceutvikling i arbeidslivet.* Oslo: Cappelen.

Dylander, Benny, Birthe Hedegaard & Kai Olesen (1986). *Medarbejderuddannelse - hvordan udvikles kvalifikationer i virksomheden?* Erhvervspædagogik, Teknologisk Institut.

Frank, C. & Hedelund, E. (1990). *Strategisk kompetensanalys.* Uppsala: IPF-rapport nr. 14.

Gullichsen, Anne Hilde (1992). *Strategisk Kompetanseutvikling eller profesjonsstyrt etterutdanning? - En analyse av opplæringsadferden i et utvalg kommuner.* Trondheim: Norsk voksenpedagogisk forskningsinstitutt.

Gullichsen, Anne Hilde (1983). *Voksenopplæring for svakstilte grupper.* Trondheim: Norsk voksenpedagogisk institutt.

Hansen, Leif, Per Fibæk Laursen & Vibe Aarkrog (1991). *Efteruddannelse - oplysning og kvalificering.* Akademisk Forlag.

Kommunale medarbejdere i 90érne - Et debatoplæg (1992). Det Kommunale Efteruddannelsesudvalg.

Kvalifikationer og uddannelser - i fremtidens social- og sundhedssektor (1990). DKA/HAF.

Nordhaug, Odd (1985). *Effekter av personalopplæring.* Trondheim: Norsk voksenpedagogisk institutt.

Scavenius, Camilla & Høyrup, Steen (1993). *Efteruddannelse i udvikling - Nye undervisnings- og læringsformer.* Det kommunale Efteruddannelsesudvalg.

PARTICIPATION, DROPPING OUT AND SELF-DIRECTEDNESS

Domination or Self-Control? Images of Participation, a Review of Research

Glenn Hultman

Linköping University
Department of education and psychology

Abstract
The role of participation in working life is discussed in terms of two models of thoughts concerning change in organizations. A review of research on different types of participation (administrative, professional and participation in change projects) are reported. Participation has a value in itself, it is embedded in ideology, has a symbolic function and serves as legitimation, plays a role in institutionalized power structures, it is sometimes related to employee attitudes and satisfaction. A lot of contradiction in conclusions can be attributed to context. Participation, per ce, is not the main thing, but an integrated strategy which includes participation, to create "good work". To understand participation we have to understand the front-line actor in context and the transformation of power, domination or self-control.

Will ongoing changes in our municipals result in different forms of participation? That is will local actors and field personnel receive more power in decision-making and day-to-day matters? Official rhetoric's claim that new organizational forms and different principles of steering will be developed. From official texts it is argued that *"Never before ... have the participation of employees been more important than today!"*. Keywords are management-by-objectives, decentralization, participation, effectiveness and flexibility.

In this chapter I will look at the literature on participation and shed some light on different forms of participation the purpose of participation, the relation between participation and output, and the meaning of the phenomenon of participation.

Participation as ritual or reality?

Researchers' and practitioners' interest in participation is embedded in ideology and motivated by morale, that is to say, participation has a value in itself no matter its practical significance. Locke & Schweiger (1979) argue that research about participation tends to be selective and normative in design (too simple categories, i.e. participative leadership vs authoritarian), in analysis and interpretation (correlations as cause-effect relations; selective appreciation of participation), and in reporting of studies (omitting negative cases; questionable results in favour of participation). The authors claim that this, to some extent, has to do with policy and politics in society.

Winter (1989: 52) reports a review of the critique on participation and three different situations or conditions for participation: *symmetry*, where different actors have the same amount of power and similar conditions; *unsymmetrical*, different powerbase (power vs powerless); *pseudo symmetry*; a situation which looks like symmetry but reveals itself to be, in reality, unsymmetrical. In the case of pseudo participation we get a situation with double-talk: management talks about participation but keeps the right to make its own decisions (hypocrisy and manipulation).

Winter also points to the fact that participation has a symbolic function and serves as legitimation for actions taken. Talking and working with projects on participation creates an image of modernity and "front-line" behaviour (humanism, democracy and effectiveness). This can also lead to a feeling of double-talk from the viewpoint of employees (look at the study and analysis of a leadership training programme in Sweden by Hultman, 1986, "Visions and mutual status-quo"). Looking at organizations as political systems will give participation a role of threat against institutionalised power structures and personal privileges and work assignments (look at changes in work among white- and blue collar workers in industry) and against clear-cut differences between parties and basic interests.

Winter (1989) argues that there is a few reasons why we see failure in the implementation of participative structures: unrealistic expectations and the complexity of implementation processes. We have to increase our understanding of things like demotivated employees, traditions and ways of behaving, competence gaps, output value vs demanded time frame and the strange situation where participation leads to its counter position, that is creates new hierarchies and lack of participation.

Organizational participation, a model of different forms of influence

This model will be used as an organizer for the discussion of the phenomenon and the concept of participation. It is to some extent influenced by the work of Conley (1991) and is displayed in figure 1 below. In this model "the small unit" should be read as small organizations, teams, and teachers in a school class. This means that I am discussing "human participation in organized activities".

This model displays four types of participation: (1) participation in change projects, (2) vertical and administrative participation, (3) horizontal and professional participation, and (4) the units' participation in the larger organization or society. These types are not clear-cut when it comes to research and practical activities but serves as an organizing device. Most research is found in the first type (implementation studies) and the second type (classical participation research, for example leadership studies). In this article I will not discuss the fourth type of participation.

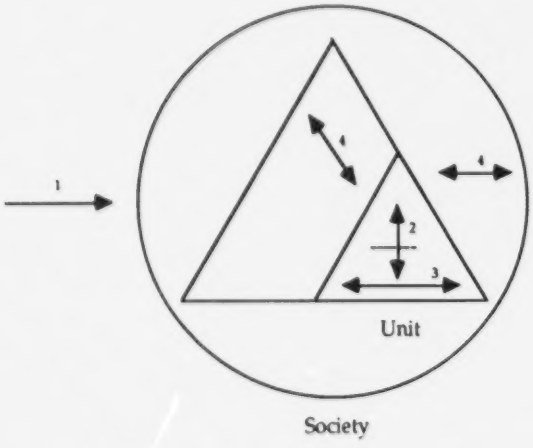


Figure 1: *A model for different types of organizational participation and forms of influence (from Hultman , 1993).*

In a study by Winter (1989: 47) participation in planned change is analysed in terms of participation in temporary- or permanent systems. This should

be kept in mind when analysing organizational change, that is, whether people are participating in something separate from day-to-day work, something that is temporary in time and place. It should not be assumed that there is a clear connection between change projects and everyday work, bearing in mind the symbolic functions of participation. This means that the temporary argument can be linked to certain aspects of the first type of participation in the model above.

Locke & Schweiger (1979) separates two types of participation due to formal aspects (coercive, indirect) or informal (by choice, direct). This could be connected to my model as aspects of all of those discussed, but the administrative type is perhaps thought of as more formal and the professional as more of an informal type. We should also be aware of the fact that we might have had a professional participation long before we tried to implement the administrative type. This could reverse our thinking of the process of participation, it then becomes a question of discovering participation, not implementing it, or maybe enlarging it? More of this later on.

Participation and power: theories of change

Participation is inevitably linked to the execution of power in organizations and thus to position in the hierarchy and the concept of steering (this last metaphor is taken from the world of technology and rational thinking; its usefulness for human services could be questioned, and this is also critical for the understanding of change in organizations). We end up in the traditional discussion about thinking and acting, that is, where we locate the power over thinking and planning on one hand and the power over implementation and the quality of services on the other. This is a discussion about premises of participation and criteria for the creation of "high quality work", especially in times of recession.

Using Conley's (1991) text on teachers' participation in decision making, Hargreaves' (1992) analysis of the concept of restructuring and Drucker's (1954, from Rombach, 1991: 39) discussion on Management by Objectives it is possible to see two models of thoughts concerning change in organizations which will be shown in figure 2 below.

These two ways of thinking differs due to their focus and how they look upon the access to the arena of interpretation and thus the distribution of power in organizations and the society. Conley (1991) argues for an integration of these models into a political model with contested areas and

decisions which overlap the main areas of administration and content (for example education and classroom activities) and in that sense we might have an arena for negotiation ("Classroom, Contested, and School Organizational Decisions", Conley, 1991: 265). For a discussion on organizations as multicultural units and loose couplings between administration and content we refer to a report by Hultman (1989: 158).

Conley tend to assume that the effects of participation is proven which is, to some extent, problematic. She builds her political frame of reference on the origin of power, authority and influence, and the idea that employees constantly, so to speak, negotiate and re-negotiate who should be in power. It then becomes important to analyse who (participates) and what (types of decisions).

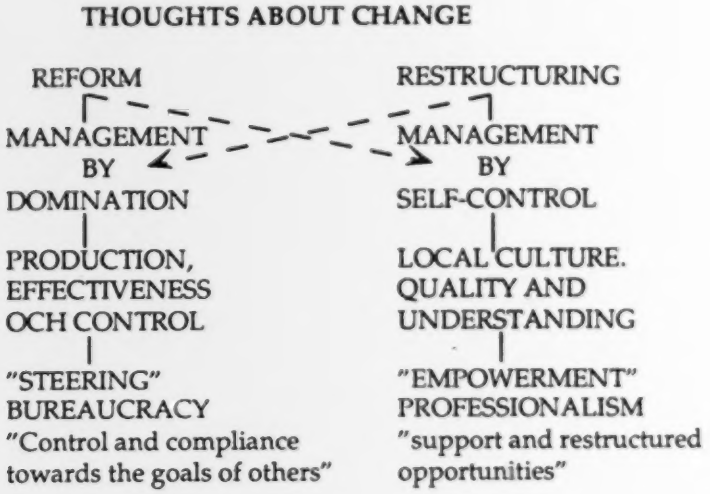


Figure 2: Models of thoughts concerning change and prerequisites for participation: Bureaucracy of Professionalism (Hultman, 1993).

Most researchers have a traditional view of organizations, including human-relations; "Thus, participation research is traditionally dominated by bureaucratic or administrative bodies of thought seeking humanistic ends" (Conley, 1991: 228). She argues for an alternative view with a focus on the

need of different actors, management seek loyalty and professionals have a need for autonomy (cf figure 1, above).

Management make decisions of an administrative and strategic nature while field personnel makes operative decisions. Our view on participation is influenced by how we look at the key for change and critical thinking, at the management- or the professional level. That is the right to take action and the power to decide.

A few researchers have developed a wider view on organizations which can be used for a broader analysis of participation (Ellström, 1983, 1984; Ellström et al., 1990; Winter, 1989; Rowan, 1990; Bolam & Deal, 1985; Pfeffer, 1981). Taking their starting point in Thompsons different forms of decision making Ellström (1983, 1984) and Rowan (1991) discuss four perspectives on work organization from a well known and clear situation to one characterised by ambiguity and complexity. This discussion is vital for our understanding of participation because it deals with the degree of autonomy and the need for participation. The different situations are described as (1) the routine task and the need for knowledge, (2) the judgmental task and the need for interaction, communication and attention to attitudes, (3) the diagnostic task and the need for analysis of different situations and interests with a focus on negotiations and (4) the inspirational task and a need for constant re-evaluation of goals and technology with a complex situation characterised by ambiguity. Conley's discussion can be assumed to deal with 1 and 2 when she talks about traditional ways of thinking and her political perspective should be close to 3. In figure 2, above, I like to see "management-by-domination" as being closer to 1 and 2 and "management-by-self-control" closer to 3 and 4.

The work of Ellström et al (1990) and Winter (1989: 70) can be used to uncover the purpose of participation for management and employees:

Perspective	Purpose: Management	Employees
o rational & routine	effectiveness	benefits
o human-relations	loyalty	work climate & satisfaction
o diagnostic & political	control	control & more power
o inspiration & institutional*	symbol, legitimation, PR	up-grading professional participation, protection

* When we understand organizations as institutions we accept that there is an independence between the administrative and the professional arena and this will call for another way of discussing participation. This means that three of the above perspectives uses more traditional forms of rationality while the last perspective use a more contextual and cultural form of rationality.

These theories can be used in studies of participation to increase our understanding of the function of participation efforts.

Defining participation

A traditional view of participation defines this concept as "participation in decision making", that is, the vertical- and administrative form. This can be illustrated in the form of a scale with four forms of participation (Yukl, 1989; Locke & Schweiger, 1979):

Autocratic decisions	Consultation	Joint decisions	Delegation
*	*	*	*
No influence by others			High influence by others

In this definition participation means the two middle forms on the scale. Locke & Schweiger restrict participation to "joint decisions".

If we use the discussion above about theories of change and organizations we find that bureaucracy might be in line with the left hand side of the scale

and professionalism on the right side. Delegation can be understood as a form of participation from a professional point of view.

To define participation I will use figure 1 and the scale of participation, above. This will give us limited participation (only administrative or consultation) as well as broad participation. The concept of broad participation includes participation in change projects, administrative and professional participation. From another point of view participation must be studied and understood as an "instrument" for the protection of quality and culture and as means to shape the organizational image. We do not have to interpret symbolism in terms of moral but more as institutional behaviour.

In the next section I will report some findings from three types of participation, following figure 1.

Research on participation: administrative, professional and participation in change projects

Studies of "participation in decision-making" is a classical field within organizational theory during the past 70 years. I will use reviews and metastudies to discuss the findings from research. In a second section I will turn to a somewhat new view on participation and look at broad forms of participation. Finally I will use research on implementation to reach some conclusions about the importance of participation.

The classical view on participation

To begin with I like to point to the fact that Locke & Schweiger (1979) and Miller & Monge (1986) in their analyses excluded popular studies like Roethlisberger & Dickson (the Hawthorne studies), Lewin ("food habits"), Trist, Bamforth & Rice (sociotechnical systems) and Coch & French (participation and resistance to change) due to weakness in method and questionable conclusions. Re-analysis of these studies have shown that other factors have played a crucial role, for example autocratic leadership and power in the case of the Hawthorne studies.

In their well known review Locke & Schweiger (1979) use productivity and satisfaction as dependent variables and they find that participation more often is related to satisfaction comparing with more strict forms of leadership. In 40 per cent of the studies analysed they found no differ-

ence or that participation was inferior. They also found that most studies showed no difference when they looked at productivity or was conditioned by situational factors. This contextual approach means that, for example, complex work situations require participation while participation will motivate employees in routine work. I refer to Schweiger & Leana (1986) for a discussion on context. These authors mentioned that these conclusions were in agreement with other reviews reported before.

A well known area for participation research is leadership research and "giants" in this field have concluded that it is impossible to reach clear conclusions (Bennis, 1959; Stogdill, 1974). Stogdill writes: "The endless accumulation of empirical data has not produced an integrated understanding of leadership" (p ii). But some researchers are more optimistic, for example House & Baetz (1979) and they conclude that leaders' initiating structure and a more strict style require some form of participation to be accepted (employees giving feed-back and voicing critique).

Weiss (1992) reports that joint decision making does not change the content of schooling but promotes teachers feeling of professionality and increases the degree of commitment. In line with House & Baetz she claims that it is important that management initiate changes in order to get close to discussion on pedagogics and content.

Meta-analysis of participation research

Miller & Monge (1986) found support for the importance of participation in itself ("multiple issues") because we reach higher needs for people, such as self-fulfilment and independence. This means that broad participation on multiple issues is more important than on specific issues like discussions on goal and policy.

In two metastudies Wagner & Gooding (1987a, b) report some findings on participation, for example, that "all-in-one instruments" or "percept-percept methods" reinforce conclusions on relations between participation and satisfaction. In their later analysis Wagner & Gooding, 1987b) they try to combine Locke & Schweigers study with Miller & Monge's and Wagner & Gooding's (1987a) and they reach the following conclusion:

> " ..., and that participation typically has only modest influence on task performance, decision performance, motivation, satisfaction, and acceptance. Combined with evidence from another recent meta-analysis by Miller and Monge, the results suggest that methodological artefacts

> explain many of the noteworthy positive findings published in research on relationships between participation and its outcomes (p 524).

One reason for the no difference syndrome can be explained by a need for a combination between participation and other types of change, for example in work organization. So far, we have seen that research can not support the notion of productivity through participation but that participation influences motivation.

Broad participation

Now I would like to widen my discussion about participation and leave the classical view focusing on the vertical dimension and look towards a broader view with an interest in the professional dimension, sociotechnical and work organization, including the Swedish work life research.

With this alternative approach we can ask ourselves, taking the school as an example, do teachers already possess a high degree of professional participation in teacher relevant issues and could management lack insight into this kind of decision making? Furthermore management might need this kind of information in their decision making and then we get a new angle on participation and changing. We might say that participation is a question of letting management play a part in operative decision making not the other way around.

Reporting a meta-analysis, Guzzo et al (1985), looked at changes in organizations, including strategies for participation in a few, and effects on productivity. They report very optimistic results and claim that certain strategies relate to productivity. The result is "large enough to be visible to the naked eye" (p 289).

Guzzo et al (1985:286) studied at different strategies, such as selection, training, appraisal, Management by Objectives, goal setting, financial compensation, work re-design, decision making strategies, supervisory methods, work re-scheduling and socio-technical design. As dependent variables they used productivity output measures (quantity and quality), withdrawal measures (turnover and absenteeism) and disruption measures (accidents and strikes).

They show that supervisory methods and work re-scheduling influence withdrawal and goal setting influences disruption. Financial compensation was important but the result depends on the situation and methods used

(they found large variations). Many strategies influenced productivity (quantity and quality) and they were (taking the strongest first): training, goal setting, socio-technical, work re-design and appraisal/feedback. Some of these could contain participation, for example socio-technical design which also introduces psychological aspects of work (meaning and learning), the technical system and employee competence. In Sweden the LOM-programme (Management Organisation Participation), as an example, has tried some of these aspects (Gustavsen, 1992) and this programme was evaluated by Naschold (1992). For a deeper understanding of important factors affecting change I refer to Hultmans (1993) analysis of research on implementation.

Eriksson & Holmer (1991) argue that we know how to create "good work" and it is possible but very hard to implement. These researchers' project, to stimulate development and create participation, showed that it was difficult to maintain a broad approach, to recruit participants to study circles. They point to the fact that not all companies really want participation and that the company context (economy, market, union strategies and policy) play a much more important role than external support (researchers) and training. In this respect I will use Björkman & Lundqvist's (1981:332) conclusion that knowledge about what constitutes a poor work environment is not sufficient for change. Companies have to seek for compromises between changes in work environment and profit.

Svensson et al (1990) and Naschold (1992) discuss problems when trying to implement changes in work organizations and creating work place democracy. Svensson et al (1990: 179) report the conclusion that they succeeded to initiate processes of democracy but very little have been implemented. This research is similar to conclusions from research on implementation (Hultman, 1993). Naschold's conclusion is that the strength of the LOM-programme was to start and gain initial participation and the weakness was process maintenance, that is, to control, support and develop change processes. In a study by Klasson, Nyrinder and Hultman (1994), we try to discuss these matters and in future studies (Hultman, Klasson and Nyrinder, 1993) we will report on change in companies focusing on learning and change processes.

Research on implementation and employee participation in change projects

In the review by Winter (1989) we can see that in late 1970 few long-range projects on employee participation are visible, a couple of OD-programmes

were tried (cf Fullan, Miles & Taylor; 1980; Hultman, 1981). He notes that not many employees have been addressed by such change programmes and that expectations on participation as an idea had not been reached. His own analysis of an OD-programme, with ambitions on broad participation, shows a very limited range of participation. He reports similar problems as discussed above, that is in motivating employees and connecting the temporary programme with ongoing work (which is an argument based on rational thinking). From a political perspective (Rombach, 1990) large change programmes can be a substitute for the lack of power to bring about real change. In Winter's case, management trends might have been the motivation for the change project as well as a need to cope with external pressures. In such a case these change projects create an arena for the organization to dramatise change (an illusion of change) and symbols of humanism while keeping the status-quo. Change projects are sometimes equal to values and Winter reports that the values of this OD-programme were close to management ideals and not in line with employees world view.

Hultman's (1993) review of research on implementation concludes, for example, that the participation, motivation and self-interests of field personnel were the most important factors for change.

Conclusions on participation research, a critical note and some new perspectives

Research on participation mirrors trends in society and thus there has been a focus on administrative forms of participation during the past decades. Today we might see a growing interest in alternative ways of looking at participation. This is displayed in this article in the discussion about types of participation (figure 1) and thoughts of change (figure 2).

The classical research shows that participation relates to employee attitudes and satisfaction (reviews) or that no correlation exists (meta-analysis). Some leadership research argues that a strict form of leadership is effective if it includes participation processes. A lot of contradiction in conclusions can be attributed to context, which means that participation interacts with the situation, sometimes it is adequate sometimes not. This interaction sometimes produces a higher quality in production and sometimes satisfaction. Yukl (1989) has addressed this situationism in his discussion on leadership theory through the use of "reinforcers" and "neutralizers".

This is to some extent reflected in participation research focusing on broader strategies and the workplace. Participation, per se, is not the main thing,

but an integrated strategy which includes participation, to create "good work". This is shown in research on implementation, in workplace field studies and in meta-analyses (Guzzo et al, 1985). Even if Guzzo's et al conclusions are very promising indeed, we have to remember those experiences, reported by Eriksson & Holmer (1991) and Nascholds (1992), about difficulties in the implementation phase. This might be understood better if we add something to our rational thinking. We ought to supplement traditional thinking and look at organizations as institutions and political bodies.

We should also be aware of the fact that research is based on very selective samples (10 per cent from one population), which is crucial when you stick to statistics and leave out theory (Hultman, 1993). How can we say something about those organizations that were drop-outs and those not in the readiness mode?

A critical note on schooling (Smyth, 1989) could be used to widen our thinking on prerequisites for participation. Smyth argues that teachers' are loosing their control over quality and pedagogics to people outside school in society's effort to shape teaching and control quality. Power is transformed to others and actors in school are left with less power and participation decreases. Society is focusing on competence but we have a crisis of trust in organizations. We always seem to end up in a situation of top-down reform where the grassroots should comply towards the goals of others (cf figure 2). And we can see what Smyth is arguing for when he talks about "empowerment": "To empower is to enable those who have been silenced to speak" (p 485).

Smyth (1992: 272) gives us some support for a critical understanding of figure 2 when he discusses trendy rhetoric's "... the rhetoric is that of autonomy and devolution, but the reality is a corporate management model that demands compliance and control". He sees moralising tendencies and points to the fact that is hard to believe that anyone can be hostile towards such things as reflection, quality and excellence. He concludes that "... these teachers found that they were able to gain charge of the knowledge-creation process, rather than be subjugated by ideas of others" (Smyth, 1992: 291).

We might find *new perspectives on participation* when we listen to research focusing on schools, for example, as local cultures with certain specific values, living in a world of external expectations. The social organization, sometimes informal, conditions the acceptance of new arrangements. Hart (1990) reports that formal structures have less impor-

tance than the social dynamic in the work place, trying to install a career ladder plan which was experienced as a top-down structural reform, in this case. What happened was that this reform created a conflict between teachers' expectations on collegiality and new forms of decision-making, power and leadership (cf Wolcott, 1977; Firestone & Bader, 1991; Hultman, 1989).

When we consider leadership we should try to turn this concept around and use a "dual credit theory" which means that leaders have to serve two masters. They are hired in the role as managers by those above, but they are also "hired" in the role as pedagogical leaders by those below. Researchers studying participation should have this in mind.

We should also try to understand that local actors live in a social fragmented world and in such a situation we should use metaphors like influence rather than steering with some. I'd like to conclude words from Conley (1991: 239-240) on the subject of teachers as front-line actors:

> Integration of separate responsibilities occurs in the context of ongoing modifications; teachers in one study noted that they repeatedly `shift gears` and change plans during the course of instruction based on evaluation of classroom events (Shedd & Malanowski, 1985). Thus, teachers are individually responsible for making their own immediate work decisions, and they deal with large amounts of information to be gathered, analysed, and evaluated.
>
> Teachers as line professionals, are the only individuals who have direct and ongoing contact with the school system's primary clients (the students). As just stated, they are the primary reservoir of organizational knowledge, the one most knowledgeable about clients instructional, counselling, and classroom managerial problems and needs. In this context, administrators need the knowledge teachers have to make effective managerial decisions (Bridges, 1967). The fact that, to date, these professionals have not been sufficiently integrated into the formal decision making process of schools (Duke, Showers & Imbers, 1981; Glasman & Hajnik, in press) provides an important rationale for increasing teacher participation; formal mechanisms for teacher participation have not facilitated greater integration in decision making (Corcoran, 1987) (pp 239 - 240).

Front-line actors themselves decide what goals and policies to implement due to practical and professional reasons. Swedish research (Stenelo, 1988) has this argument and claim that teachers are in power of a decentralised school.

To understand participation we have to understand the front-line actor in context. This means an understanding of organizations as institutions, local cultures and political bodies. Participation has to do with the transformation of power and management by domination or self-control.

Acknowledgements

This article was supported by grants from the Regional Municipal Research Council at Linköping University.

References

Bennis, W.G. Leadership theory and administrative behavior: The problem of authority. *Administrative Science Quarterly*, 4, 1959, 259 - 260.

Björkman, T. & Lundqvist, K. *från MAX till PIA. Reformstrategier inom arbetsmiljöområdet. Malmö:* Arkiv avhandlingsserie 12, 1981.

Bolam, L.G. & Deal, T.E. *Modern approaches to understanding and managing organizations.* San Francisco: Jossey-Bass publ., 1985.

Conley, S. Review of research on Teacher Participation in School Decision Making. I *Review of Research in Education*, no 17, 1991, pp 225 - 266.

Ellström, P.-E. Four Faces of Educational Organizations. *Higher Education*, 12, 1983, 231 - 241.

Ellström, P.-E. *Rationality, Anarchy, and the Planning of Change in Educational Organizations. A Study of Problemsolving and Planning of Change in Small Work Groups.* Linköping University, Diss No 22. 1984.

Ellström, P.-E., Davidsson, B. & Rönnqvist, D. *Kontext, kultur och verksamhet. En analys av AMU's organisation och pedagogiska miljö.* Universitetet i Linköping: Institutionen för pedagogik och psykologi, 1990.

Eriksson, K. & Holmer, J. *Studiecirklar som stöd för förändring av arbetslivet.* Rapport nr 1991: 09. Göteborgs universitet, Institutionen för pedagogik.

Firestone, W.A. & Bader, B.D. Professionalism or Bureaucracy? Redesigning Teaching. *Educational Evaluation and Policy Analysis*, Vol 13, No 1, 1991, pp 67 - 86.

Fullan, M., Miles, M.B. & Taylor, G. Organization Development in Schools: The State of the Art. *Review of Educational Research*, Springs 1980, pp 121 - 183.

Gustavsen, B. *Dialogue and development. Social science for social action: toward organizational renewal.* Volume 1. Van Gorcum, Assen/Maastricht, the Swedish Center for Working Life, Stockholm, 1992

Guzzo, R.A., Jette, R.D. & Katzell, R.A. The effects of psychologically based intervention programs on worker productivity: A meta-analysis. *Personnel Psychology*, 38, 1985, pp 275 - 291.

Hargreaves, A. *Restructuring restructuring: postmodernity and the prospects for educational change.* Unpublished paper, 1992.

Hart, A.W. Impacts of the School Social Unit on Teacher Authority During Work Redesign. *American Educational Research Journal*, Vol 27, No 3, 1990, pp 503 - 532.

House, R.J. & Baetz, M.L. Leadership: some empirical generalizations and new research directions. In Staw, B. Ed. *Research in Organizational Behavior*, Vol. 1, 1979, 341 - 423.

Hultman, G. *Organisationsutveckling genom ledarutbildning. En utvärdering av skolledarutbildningens första utbildningsomgångar.* Diss. 13. Universitetet i Linköping, Institutionen för pedagogik och psykologi, 1981.

Hultman, G. *Visioner och ömsesidig status-quo. En ledarutbildnings funktion och process.* Universitetet i Linköping, Institutionen för pedagogik och psykologi, R-104, 1986.

Hultman, G. The state of the art of school administration: a review of facts and theory. *Scandinavian Journal of Educational Research*, Vol. 33, No. 2, 1989.

Hultman, G. *Organisatorisk delaktighet och förändringens pedagogik. Kunskapsöversikt om anställdas delaktighet vid förändring inom området kommunernas förändrade organisation och styrformer.* Universitetet i Linköping, Institutionen för pedagogik och psykologi, 1993-01-18, manus.

Hultman, G., Klasson, A. & Nyrinder, B. *Förändringsarbete i små företag. En studie av förändringsprocesser, delaktighet och lärande.* Opublicerat manus, (Unpublished paper) 1993.

Klasson, A., Nyrinder, B. & Hultman, G. The Company as a Classroom - To establish work-place Learning Processes. In Bradley, G. & Hendrick, H.W. *Human factors in Organizational Design and Management - IV.* North Holland, Elsevier Science Publishers B.V., 1994 (in press).

Locke, E.A. & Schweiger, D.M. Participation in Decision-Making: One More Look. I *Research in Organizational Behavior*, Vol., 1, 1979, pp 265 - 339.

Miller, K.I. & Monge, P.R. Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, No. 4, Vol. 29, 1986, pp 727 - 753.

Naschold, F. *Evaluation report. Commissioned by the Board of the LOM Programme*, 1992.

Pfeffer, J. *Power in organizations.* Marshfield, Mass., Pitman publ inc, 1981.

Rombach, B. *Kvalitet i offentlig sektor. Att mäta och förbättra kvaliteten i landstingets verksamhet.* Stockholm: Norstedts, 1990.

Rombach, B. *Det går inte att styra med mål!* Lund: Studentlitteratur, 1991.

Rowan, B. Commitment and Control: Alternative Strategies for the Organizational Design of Schools. In Casden, C.B. *Review of Research in Education*, 16, 1990 353 - 393.

Rowan, B. Applying Conceptions of Teaching to Organizational Reform. In Elmore, R.F. *Restructuring Schools. The Next Generation of Educational Reform.* San Francisco: Jossey - Bass Publ., 1991.

Schweiger, D.M. & Leana, C.R. Participation in Decision Making. I Locke, E. A. (ed) *Generalizing from Laboratory to Field Setting.* Lexington, Mass. : D. C. Heath and Company, 1986.

Smyth, J.A. Critical Pedagogy of Classroom Practice. *Journal of Curriculum Studies*, 21, No. 6, 1989, 483 - 502.

Smyth, J. Teachers' Work and the Politics of Reflection. *American Educational Research Journal*, 29, No. 2, 1992, 267 - 300.

Stenelo, L.-G. *Makten över den decentraliserade skolan.* Lund: Studentlitteratur, 1988.

Stogdill, R.M. *Handbook of leadership: A survey of the literature.* New York: Free Press, 1974.

Svensson, L., Aronsson, C. & Höglund, S. *Kan byråkratin förändras?* Stockholm: Ordfront, 1990.

Yukl, G.A. *Leadership in Organizations.* 2 ed. Englewoods Cliffs, N J: Prentice-Hall, Inc, 1989.

Wagner III, J.A. & Gooding, R.Z. Effects of Societal Trends on Participation Research. *Administrative Science Quarterly*, Vol. 32, 1987a, pp 241 - 262.

Wagner III, J.A. & Gooding, R.Z. Shared Influence and Organizational Behavior: A Meta-Analysis of Situational Variables Expected to Moderate Participation-Outcome Relationships. *Academy of Management Journal*, No. 3, Vol. 30, 1987 b, pp 524 - 541.

Weiss, C.H. *Shared Decision Making About What?* Paper for the annual meeting of the American Educational Research Association, San Francisco, April 21, 1992.

Winter, H.A. *Anställdas deltagande i organisationsutveckling. En teoretisk och empirisk analys av förutsättningarna för participation.* Diss No 25. Universitetet i Linköping: Institutionen för pedagogik och psykologi, 1989.

Wolcott, H.F. *Teachers vs Technocrats. An Educational Innovation In Anthropological Perspective.* Eugene, Ore., University of Oregon, 1977.

From Self-directedness to Interdependence?

An Analysis of Mezirow's Conceptualization of self-directed Learning

Leena Ahteenmäki-Pelkonen

Abstract

Self-directed learning is a central and inspiring theme in adult education. However, adult educators and researchers understand it in many different ways. In this article Jack Mezirow's critical theory of adult learning and transformation is analyzed. Mezirow's views lead us to ask what kind of assumptions form the basis of self-directed learning and how relevant the concept actually is at present when the time of individuality and self-fulfilment has passed because of the rapid changes in societies. Could the idea of learner centredness be better expressed using some other concept which would take better into account the social aspects of self-directedness and the idea of interdependence?

Self-directedness unites and separates

A central, inspiring idea of adult education today is self-directedness. One cannot avoid encountering it in almost every book of the field, and there exists a multiplicity of relevant research. Principles of self-directedness or self-directed learning have been emphasised in the education of other age groups as well. This can be considered natural from the point of view of life-long learning.

Importance of the self-directedness emerges in front of me as an image: I see a group of adult educators and researchers gathered together in a congress. During an intermission a lively discussion can be heard. Lectures and timely presentations have created an active interchange.

The term "self-directedness" is often heard during these discussions. It is pronounced like in a state of devotion. This term is like a message from one

adult educator to another: on this we all agree, this is a sign by which we recognize each other.

If someone stops to listen more carefully the talks, s/he notices that people speak on a rather general level. Everyone seems to unite with the consensus about the importance of self-directedness. However, a careful observer soon becomes aware of the fact that the participants have very different views. When the discussion turns into the content of self-directedness many gather behind a leader figure in the field. Some lonely wanderers may express their own view, but do not necessarily relate it to the ideas of others.

In this situation there is a need to clarify the concept of self-directedness. The observer wants to stop and go deeper. S/he might like to take one of the opinion leaders aside to have a discussion on how he understands self-directedness. The observer, with some more insight and understanding, can then meet other discussants in order to learn more.

In this way I have approached one researcher of self-directedness (see Ahteenmäki-Pelkonen 1993). To my discussion partner I have chosen the US adult education scholar Jack Mezirow. His critical theory of transformations in adult learning and education has aroused a lot of interest, partly because it can be seen as an application of Habermas' critical theory. In this framework Mezirow also discusses of self-directedness.

I have discussed with Jack Mezirow via his writings and with him personally. Beside several articles, Mezirow has edited the book *Fostering Critical Reflection in Adulthood* (1990) and published his own theoretical statement as a book *Transformative Dimensions of Adult Learning* (1991). Mezirow visited the University of Helsinki in September 1993.

Ideal of emancipatory learning

Jack Mezirow's theory on adult learning emerged when he became acquainted with women in their middle years. The adult studies of his wife Edee and her participation in women's consciousness groups influenced the dynamics of their family. Jack Mezirow's job experiences as a counsellor of women's college re-entry programs led him to become a leader of women's consciousness groups. (Mezirow 1978; 1991, xvii; interview 6.9.1993.)

The transformation processes experienced by women influenced especially their interpretations of earlier experiences and ways of setting the bases for future action. This personal frame of reference or paradigm Mezirow calls

meaning perspective. Inside its frame there are single, narrower meaning schemes. A meaning scheme influences an individual's self concept, social relations and roles. (Mezirow 1978, 101, 105, 108; 1981, 6; 1985a, 21-22: 1985b, 144-145; 1990a, xiv-xvi; 1990b, 2-3.)

Most of the middle aged women have been socialized into the traditional roles offered by their environments. Emancipation mean becoming aware of these roles and at the same time liberation for giving new meanings to earlier experiences. Often this was originated by an important change in the life (e.g. change of job or home, starting a new human relationship or finishing one) and by the dilemma associated with the new situation. (Mezirow 1978, 101, 107-109; 19981a, 16).

This important process of learning and change has, according to Mezirow been unduly surpassed when considering adult learning. Learning is not only a question of acquiring separate knowledge and skills, but also of deep perspective transformation, which can be compared to the paradigm shift in research defined by Kuhn. (Mezirow 1978, 109; 1990b, 12-13.)

Mezirow names three kinds of learning according to Habermas' interests of knowledge. Instrumental learning corresponds to the technical interest of knowledge, and it is used to gain additional information required for more efficient action. Dialogical learning corresponds to the practical interest of knowledge, and by it one studies the meanings and interpretations of interaction. The emancipatory interest of knowledge is concerned with power, and emancipatory or self-reflective learning corresponds to the perspective transformation mentioned earlier. (Mezirow 1981, 3-6; 1985a, 18-21; see also Habermas 1972, 308-313.)

On this basis Mezirow has constructed his critical theory. The criticism is focused narrowly to the power structures of society: Mezirow looks primarily at the function of culture in formation of an individual. He does not consider the other structural factors of the society, but refocuses the social criticism of his main sources, Freire and Habermas, to cultural criticism.

According to Mezirow adult education has supported mainly traditional norms. The emphasis of education has been on instrumental learning, and people have been given answers to questions *What?* and *How?*. Question *Why?*, which could open critical consciousness, have almost entirely been omitted. (Mezirow 1981, 16-18; 1985a, 18-19.) Adult students have little experience of self-reflective and emancipatory learning and therefore they have unconsciously strengthened traditional norms by their own thinking and action.

The ideal of adult learning is perspective transformation. The goal is to create an authentic meaning perspective. Authenticity should be understood here as basing an action on factual knowledge, not on assumptions or wishes. An authentic meaning perspective structures different kinds of experiences from different periods in one's life and helps to interpret them. It is also open to interaction and alternative views. An adult with an authentic meaning perspective is ready to well argumented changes. (Mezirow 1985a, 21-22, 28.)

Ideal of communicative learning

Mezirow considers adult learning also from another point of view. His ideas are based on Habermas' theory of communicative action. It must be said, however, that he does not present the background of Habermas' theory in a detailed way. According to Habermas, the only alternative to dictatorial politics is an action based on communication and interaction. It is people's only way to influence their own reality and environment. (Habermas 1984; 1987.)

Mezirow's point of view is more individualistic than above and he focuses on the transformation of individual's meaning perspective. Transformation is a time-demanding and difficult process. Often it is impossible for individuals to realize alternative lifestyles by themselves, since the current lifestyle, in spite of its deficiency, is familiar and beloved, and given up only after some unwanted changes in one's life.

Communication helps to realize that there are alternative ways to interpret earlier experiences and to give meaning to one's own action. The mere fact that people act differently can raise questions. In addition to ordinary discussion - dialogue - Mezirow stresses the importance of critical discourse, in which different alternatives and their rationale and legitimation are evaluated by making *Why?*-questions. (Mezirow 1985b, 143-144; see also Habermas 1984, 273-344).

A critical discourse necessitates freedom from internal and external obstacles. Authentic relationship with the environment is always in danger because of distortions, which are caused by the environment or by individual's habits of perceiving, thinking, and feeling. For example, poor selfrespect is a usual psychic distortion which may make it difficult to fully engage in a learning process and therefore reflects to learning outcomes as well. (Mezirow 1985a, 21-24; 1985b, 143-145; 1990b, 14-17).

Adoption of alternative meaning perspective in a critical discourse leads often into a concrete action: individual's transformation is followed by an environmental change. Mezirow differs from Freire when he says that an action is not a necessary outcome of perspective transformation. Need for action and qualities of an action should be judged in every situation. Often this process leads into action projects where the values jointly accepted are knowingly pursued. Such projects of action can, for example, aim at developing learning institutions in such a way that these do not define the roles of adult learners in advance, but take the students' own intentions better into account. (Mezirow 1990b, 6, 12, 16-17; 1990c, 354-358; Interview 6.9.1993 and Lecture 9.9.1993).

It is typical to Mezirow that he takes the core content from Habermas' writings and accommodates it into his own ideas; he doesn't analyze or evaluate the intentions behind the Habermas' writings. Therefore Mezirow's interpretation of Habermas is rather narrow. Anyhow, the analysis of self-directedness in the framework of critical theory is a fresh approach and it points out new aspects of this concept.

Ideal of self-directed learning

The essence of Mezirow's theory is a different conception of learning, which reflects his conception of human nature. The type and nature of a particular adult education is based on the vision how learning is understood. Definition of self-direction is closely related to how adult learning is understood.

Analysis of Mezirow's writings (Ahteenmäki-Pelkonen 1993) points out that the meaning of self-directedness can be defined with help of four key concepts. First of all, in self-direction critical consciousness is central, and this leads to question the culturally constructed belief systems by making *Why?* -questions. (Mezirow 1981, 21; 1985a, 17; 1990a, xv-xvi; 1990b; 1, 12-13). Critical consciousness is a necessary, but not sufficient condition of self-directedness.

Authentic meaning perspective is another aspect of self-directedness. The meaning perspective of a self-directed person develops towards an authentic ideal. As mentioned earlier, authentic means that the meaning perspective is realistic, extensive and open to different alternatives. Therefore Mezirow critically examines the individual's own conceptions: the mere fact that the individual him/herself has expressed an idea does not make it an absolute truth, and does not necessarily prove self-directedness.

With the qualities of the meaning perspective a self-directed individual may simultaneously have some strong distortions, such as overemphasized ambition, fanatism, self-contempt, and corruption. (Mezirow 1985a, 28). These distortions easily break the harmonious picture usually given of self-directedness.

Authentic meaning perspective can be best approached through critical communication. Self-directed learner participates in an evaluative discourse, where an earlier meaning perspective is analyzed and alternatives are searched. A self-directed learner participates in the discourse as fully as possible and free from coercion and self-deception. (Mezirow 1985a, 27; 1985b, 147; 1985b, 145).

A discourse will result in an agreement of the principles of an action. This is the basis for an action with jointly accepted values. Participation in an action is based on the contractual solidarity; a self-directed learner commits him/herself consciously into common objectives and means (Mezirow 1978, 105-106; 1981, 9; 1985a, 25).

Mezirow's definition of self-directedness is parallel to the other aspects of his theory, as the terminology used suggests. In most cases when self-directedness is mentioned, Mezirow only makes a short note and defines self-directedness using other key concepts of his theory, and discusses the theme from this perspective. The definitions of self-directedness remain therefore infrequent and short.

Self-directedness has a very close relationship with the other concepts of his theory. Self-directedness is the ideal of adult development and demonstrates a mature personality. It represents the highest level of learning: emancipatory and communicative learning, which result in individual transformation and often also in transformations of an environment. Self-direction guides adult education, in which the aim is to develop critical discourse.

A comprehensive ideal or an empty shell?

The relationships of self-directedness with other elements of the theory are so solid that one may ask whether the concept has any characteristic and meaning of its own. All the attributes and concepts used in definitions are related to other elements of the theory. Is self-directedness such a comprehensive and overriding ideal?

An alternative interpretation can be suggested, too: is self-directedness after all a secondary concept in Mezirow's theory, without any value in itself? Is it added into the theory because of current interest? Is it just a means to familiarize sophisticated adult educators with the more demanding ideas of the theory?

I asked once whether he would have been able to create his theory without using the concept of self-directedness. After a moments consideration he agreed (Interview 6.9.1993). After a few days I approached the matter from a different point of view by asking whether he would use the term today if the theory were still under development. The answer was no. The reason for that was the multifaced meaning of the concept *Self*. The strong emphasis on individuality is in contradiction with the communicative aspects of the theory. (Interview 10.9.1993). Mezirow's theory has been criticized to be too individualistic (see for example Jarvis 1987; Hart 1990; Clark & Wilson 1991).

According to Mezirow, professional adult educators realize that the selfevident goal of adult education is to facilitate self-directed learning (interview 6.9.1993). Therefore there is no need to emphasize the concept of self-directedness. Its facilitation is the hidden curriculum which professional adult educators have chosen consciously to characterize their teaching.

It is possible that Mezirow here generalizes too much. At least it is apparent that adult educators understand self-directedness and its facilitation in many different ways. This confusion is clearly present in the literature of adult learning and education. A distinction has to be made between the goals and the results in practice, which do not always correspond with each others.

Fading concept of self-directedness?

It is time to stop the dialogue with Mezirow and come back to the congress hall which was described in the beginning of the article. It is time to ask what impact Mezirow's distinctive ideas have on the debate and on research on self-directed learning. Further research is also needed to compare Mezirow's conceptions with the others in the field.

In Mezirow's theory one can clearly see how closely the conception of self-directedness is connected with other elements of the theory. Therefore the question about the assumptions behind self-directedness arises quite naturally. Usually we use self-directed learning at the level of definition only and leave the underlying assumptions aside. However, when we choose some

definition as a starting point for our action or research, we should also realize what other ideas we simultaneously approve as a basis for our work.

Mezirow emphasized the communicative dimension of self-directedness. Self-directedness is not synonymous to absolute, unlimited self-expression of the individual. An individual can have distortions which limit his/her view of the reality, of him/herself and of the relationship between them. Distortions do not live only in the sociocultural environment but within the individual, too. Therefore the views and ideas an individual presents should be analyzed and criticized in the same way as those of the culture.

Even though Mezirow sees self-directedness as the ideal of adult development, learning and education, his point of view is realistic. Mezirow admits that there are various distortions embedded in self-directedness. This broken ideal of self-directedness leads us to see it as an objective for a process. It also rises the question about the variations of self-directedness.

The background of Mezirow's theory is in the womens' movement and in the womens' learning experiences. He abandons this group at an early phase and starts to talk about the transformation processes and learning of the adults in general. Mezirow does not take into account the context of learning, which has caused some hard critique towards his theory. Some researchers have suggested that contextual factors which Mezirow sees as distortions, can in fact be elementary conditions of self-directedness (Clark & Wilson 1991).

One can say that Mezirow generalizes strongly and generalizes the experiences of a small group of women to cover all adult students. Self-directedness is traditionally connected to emancipatory or transformative learning which are seen as opposites to instrumental learning. However, it would be important to analyze what role self-directedness plays in instrumental learning. The variations of self-directedness connected with different subject matters or problems in different learning contexts should be analyzed in the future.

Mezirow is willing to give up the concept of self-directedness, but not the content of it. It is quite apparent that the term *self-directed learning* does not correspond very well with the way in which Mezirow emphasizes both individual and communicative aspects of adult learning. What could then substitute this concept? Or has the term already been so widely in use that it is impossible to change? Mezirow is not willing to give us the answer: we should create it together - in a critical discourse.

A solution could be found in the concepts which emphasize both individual and communicative dimensions. For example, the term *contractual solidarity*

which Mezirow sees as a starting point for self-directed action, is rather close to this ideal. The same idea can be found in the term *self-directed inter-dependence* which Knowles (1980, 30) mentioned - unfortunately only once and in parenthesis, without developing it further.

The sovereign individuality and self-fulfilment are no longer stressed so much, and there is a growing interest in the relationship between the individual and the environment. Man is understood as a subject of his reality (Freire 1972; 1975) or as a partner of his/her environment. In social relations two-way interaction is seen as important.

These ideas can hardly be best expressed using the individual-centred term *self-directedness*. This term was relevant to the researchers in the 1970's and 1980's, for example to Knowles (1975, 1980) or Guglielmino (1977). They have used the term to stress the learner-centredness as an alternative to teacher-directed learning technology. Now it has proved to be insufficient.

Therefore we should ask: what will come after self-directed learning? What is the contribution of the 1990's to the practice and theory of adult education? How do we transform and develop the legacy of the past decades? What lessons have we learnt from the social and cultural changes which have taken place during the last few years? What is the preferred direction for the future development?

References

Mezirow's publications:

1978. Perspective transformation. *Adult Education* (USA), XXVIII, 2, 100-110.

1981. A critical theory of adult learning and education. *Adult Education* (USA), 32, 1, 3-24.

1985a. A critical theory of self-directed learning. In: Brookfield, S. (ed.): *Self-directed learning: from theory to practice. New directions for continuing education 25.* San Francisco: Jossey- Bass, 17-29.

1985b. Concept and action in adult education. *Adult Education Quarterly.* 35, 3, 142-151.

1990a. Preface. In: Mezirow, J. (ed.): *Fostering critical reflection in adulthood. A guide to transformative and emancipatory learning.* San Francisco: Jossey-Bass, xiii-xxi.

1990b. How critical reflection triggers transformative learning. In: Mezirow, J. (ed.): *Fostering critical reflection in adulthood. A guide to transformative and emancipatory learning.* San Francisco: Jossey-Bass, 1-20.

1990c. Conclusion: Toward transformation learning and emancipatory education. In: Mezirow, J. (ed.): *Fostering critical reflection in adulthood. A guide to transformative and emancipatory learning.* San Francisco: Jossey-Bass, 354-376.

1991. *Transformative dimensions of adult learning.* San Francisco: Jossey-Bass.

Interviews and the lecture:

Interview 6.9.1993. Jack Mezirow / Leena Ahteenmäki-Pelkonen. The author has the notes.

Interview 10.9.1993. Jack Mezirow / Leena Ahteenmäki-Pelkonen. The author has the notes.

Lecture by prof. Jack Mezirow: A transformation theory of adult learning. University of Helsinki, Department of Education, 9.9.1993.

Literature

Ahteenmäki-Pelkonen, L. (1993). *Mezirowin käsitys aikuisopiskelijan itseohjautuvuudesta.* Helsingin yliopisto, kasvatustieteellinen tiedekunta, kasvatustieteen laitos. Aikuiskasvatustieteen lisensiaatintutkimus. (Mezirow's view of adult self-directed learning. Licensiate thesis in adult education. University of Helsinki, Department of Education.)

Clark, M.C. & Wilson, A.L. (1991). Context and rationality in Mezirow's theory of transformational learning. *Adult Education Quarterly* 41, 2, 75-91.

Freire, P. (1972). *Pedagogik för förtryckta.* Stockholm: Gummessons.

Freire, P. (1975). *Utbildning för befrielse.* Stockholm: Gummessons.

Guglielmino, L.M. (1977). *Development of the self-directed learning readiness -scale.* Doctoral dissertation. University of Georgia. University Microfilms International.

Habermas, J. (1972). *Knowledge and human interests.* London: Heinemann.

Habermas, J. (1984). *The theory of communicative action. Volume I. Reason and the rationalization of society.* London: Heinemann.

Habermas, J. (1987). *The theory of communicative action. Volume II. Lifeworld and system: A critique of functionalist reason.* Boston: Beacon Press.

Hart, M. (1990). Critical theory and beyond: Further perspectives on emancipatory education. *Adult Education Quarterly* 40, 3, 125-138.

Jarvis, P. (1987). Meaningful and meaningless experience: Towards an analysis of learning from life. *Adult Education Quarterly* 37, 3, 164-172.

Knowles, M.S. (1975). *Self-directed learning: a guide for learners and teachers.* Chicago: Association Press Follett.

Knowles, M.S. (1980). *The modern practice of adult education: from pedagogy to andragogy.* Revised and updated. New York: Cambridge: The Adult Education Company.

Evaluation of a new Education for Shop Stewards

Bjarne Wahlgren

The Research Centre of Adult Educations
The Royal Danish School of Educational Studies

Abstract
The Danish system of trade union internal training (the FIU system) was launched in 1974. Since that time the contents and pedagogics of this training have been developed. As a part of this development a new kind of education for shop stewards was carried out in 1992. The education was evaluated thoroughly. This article deals with one single aspect of the evaluation and its results: the measuring of the activation effects of the education.

1. Introduction

In 1992 the Union for Public Workers which is one of the largest Danish trade unions designed a new education for shop stewards.

The education is characterized by having a duration of three months with averagely one course day a week. This is a new characteristic compared to the existing education for shop stewards which is structured in weekly moduli. The basic idea is to strengthen the link to the local trade union work and to secure the greatest possible implementation of what is being learnt.

Accordingly the education emphasizes the local anchoring, a high degree of activation among the participants, and the inclusion of the shop stewards' concrete experiences and problems. The education has been structured in an interplay of the educational activities and the daily work as shop stewards. The participants work in autonomous groups under guidance.
As it was an extensive developmental work which was meant to lead to a permanent education later on, it was important to gather the experiences

from the course of the education. Accordingly an extensive evaluation was carried out alongside the education.

The evaluation included the teachers, the use of teaching materials, the degree of attendance, the home work, the participants' outcome and opinions about the various themes and the teaching sequences. In this article only one single aspect is described: the measuring of the the shop stewards' union activities.

2. Measuring the activation

The evaluation of an educational activity is often linked either to subjective opinions concerning the participants' outcome of the education or to tests in which the aquired knowledge and skills are looked into.

In this evaluation we have tried to measure the changes in activities which the education leads to. This is of course due to the fact that one of the most important objectives of the education for shop stewards is to make the shop stewards more active. For that reason an essential question in the evaluation is if and if occasion should arise, to which degree the participants have become more active.

Accordingly we have looked into the pattern of the participants' activities for a period of three months before the education starts, during the three months for which the education lasts and during a period of two to five months after the end of the education. The data collection has included:

1. A postal questionnaire which all the participants have answered before they embarked upon the education.

2. A questionnaire which all the participants answered at the end of the education.

3. A questionnaire to all the participants five months after end of the education.

The total number of participants who embarked upon the education was 113 distributed on ten courses over the whole country. Ten participants dropped out. 94 participants (91%) of those who went through the education have answered all three questionnaires.

We have asked the shop stewards about their level of activity in a number of fields which are relevant to the trade union profession. The fields include to what extent initiatives have been taken in works committees, safety committees, towards the management, or towards the colleagues. Besides the fields include the conduct of information meetings, trade union arrangements, participation in club activities and contacts to the trade union. The posed questions are shown in the table below.

3. The actual activation

At the beginning of the investigation we assumed that participation in the course would be so time consuming that some of the participants would have to cut down on their trade union activities during the education. At the same time we assumed that the education *would* lead to some activation as activation was part of the education. Our hypothesis was that the net effect on the total activation would be nil. However this has not turned out to be the case. The hypothesis has had to be rejected. A comparison of the figures before the start of the course with the figures at the end of the course shows a significant increase in activation.

The concrete figures are shown in the table below.

In all the fields of activation the percentages of active shop stewards has increased. The increase amounts to between 5% points and up to 31% points, in two cases there is almost a doubling. These cases concern initiatives directly towards the management and initiatives towards the colleagues.

In five fields, which all concern the activities at the working place and the information meetings, as well the numbers of active persons as the extent of the activities have increased. This means that more persons have become more active.

In three fields, which all concern the activities in connection with the clubs and sections, there is a slight decrease in the percentage of persons who are very active (more than two activities within the last three months). In these three fields more persons have become active. However a few of these are less active during the course than before the course. It is tempting to interpret these figures as an expression of the probability of the figures. It is likely that in at least some fields the activity decreases while the shop stewards attend the course, which is in fact the case.

Another field of activity - which has not been included in the table - in which the activity has slightly decreased is the attending of meetings in the town councils and in the county councils. While 85% of the participants had not attended meetings in the town coucils or the county councils before the start of the education, 88% of the participants have not attended these meetings during the education.

One may ask whether this significant increase in activity has lasted. The figures are also shown in the table. The figures show that more people have become active and that the active persons have become more active.

More than 80% of the participants have taken initiatives towards the management and an equal percentage towards colleagues within the last three months. Before the course these percentages amounted to respectively around a third and around half of the participants. Especially the percentage of participants who have taken more initiatives has increased significantly.

Thus there is no doubt that the participants have become significantly more active in all the fields which are relevant to the trade union profession. This increase in activity has continued after the end of the education.

One may critically ask whether it is really the education which has made the shop stewards active. Would these persons not in any case have become (equally) active? This point could in fact be true, as the course is aimed at "new" shop stewards.

We can not be certain how a "control group" that is a similiar group who had not participated in the course would have developed. The study does not include such a control group. However two significant circumstances make the critisism seem unlikely.

Firstly the participants have not been elected quite recently. Most of them have worked for a period of more than a year before they have embarked upon the education. Accordingly they have had time to become active if they wanted to. Thus it is fair to assume that the level of activity which has been measured before the participation in TR 95 is a constant (and not at all) low level of activity. The increase in activities goes beyond this level.

Secondly the time of the increase in activities is connected with the course and is of such an amount that it is difficult to imagine other kinds of factors which may have influenced on the shop stewards' activities exactly at that point of time.

Table 1. The amount of trade union professional activities in various fields before, at the end of, and five months after the course. The figures indicate the percentages of shop stewards who are active.

	Before	At the end	After 5 months
1. Have you taken professional initiatives in the works council at your working place?			
Once or twice:	23%	36%	35%
More than twice:	9%	14%	35%
2. Have you taken professional initiatives in the safety council at your working place?			
Once or twice:	4%	9%	25%
More than twice:	4%	5%	8%
3. Have you taken professional initiatives directly towards the management at your working place?			
Once or twice:	23%	51%	43%
More than twice:	12%	15%	38%
4. Have you taken professional initiatives towards your colleagues at your working place?			
Once or twice:	34%	53%	44%
More than twice:	17%	21%	40%
5. Have you conducted meetings of information or discussion?			
Once or twice:	27%	32%	37%
More than twice:	5%	6%	12%
6. Har you participated in arrangements held by your section?			
Once or twice:	33%	46%	45%
More than twice:	27%	23%	28%
7. Have you participated in club activities?			
Once or twice:	20%	32%	33%
More than twice:	17%	14%	20%
8. Have you been in contact with your section in connection with professional problems?			
Once or twice:	33%	44%	30%
More than twice:	15%	13%	27%

Thus there is no doubt that the course has significantly contributed to the large increase in activities which has been measured.

4. Summing up

Experience shows that it is difficult to make participants act differently although they aquire more knowledge and insight. Due to this fact the results are especially interesting.

The evaluation documents that the education has contributed to a significant increase in the shop stewards' union activities, especially in connection with the activities which concern initiatives aimed directly at the management and the colleagues. Here the number of active shop stewards has more than doubled up and furthermore the already active shop stewards have become even more active. The study also documents that the effect of the activation not only lasts after the end of the education but it has also increased five months after the end of the education.

As Teachers See It - Why There Are Drop-Outs from Continuing Education Programmes for Adults. What Teachers Know

Bjørn-Emil Madsen

The Norwegian Institute of Adult Education, Trondheim

Abstract

The figures presented here come from a pilot study in connection with the project "Barriers Against Completing Basic Qualifying Adult Education". The objective of this study was to examine what teachers believe are the reasons for people dropping out from continuing education for adults and how teachers assess these reasons. The results show that teachers have widely different interpretations of the educational backgrounds of participating students and different interpretations of the reasons for dropping out, both generally and distributed according to gender. This may indicate that dropping out, in spite of that fact that it has been and still is a major problem, is not accorded sufficient emphasis and interest by teachers, or that teachers' work conditions do not allow them to become involved in this type of issue. With this in mind the ability of teachers to be good "adult educators" may be questioned. Perhaps these results indicate a distinct need for further or continuing education of teachers to improve the quality of the "adult education" given. If we can regard the teachers' responses as more than uncertain conjectures, it may appear that social framing conditions outside the school situation itself must be seen as a contributing factor to dropping out, probably through an indirect effect. However, it cannot be ruled out that this result may also indicate the apparent lack of involvement by teachers in the drop-out issue. By pointing out reasons for dropping out which lie outside their domain, teachers distance themselves from responsibility and minimize their importance in inhibiting participants from dropping out. With certain reservations some of the results may nevertheless be said to support the importance of including the total life situation of participants in this analysis. Furthermore, it may appear that there are different grounds for men and women dropping out. Women may appear to be trapped by traditional care functions, while men appear too ambitious with regard to their own abilities and capacity for work.

Introduction

That drop-out issue has been a problem ever since the inception of organized adult education at the start of the previous century. We find particularly in adult education aimed at increasing the qualifications of participants that reducing the annual drop-out rate is one of the greatest challenges (Wilson, 1980). Anderson and Darkenwald (1979) claim that the chance of dropping out from "basic qualifying adult education (hereafter designated by the Norwegian acronym GKV) at the upper secondary school level", in this case "high-school", is up to four times higher than for other types of adult education. In Norway it may appear that the drop-out rate for upper secondary education arranged especially for adults, lies between 30% and 50% (Madsen, 1991, Gooderham, 1989 and Skaalvik, 1980).

A number of adults take part in GKV because they did not succeed in their previous schooling, for whatever the reason. As pointed out by Mezirov et al. (1975), participating in adult education may be a final attempt at acquiring education. Dropping out will thus close the door to opportunities and open the door to frustrations (Wilson, 1980). Those who drop out may feel this as a personal defeat and they may also establish or reinforce negative attitudes about training and gaining more knowledge. Dropping out may also mean the loss of the chance to improve one's position in the labour market, either immediately or in the long-run by not qualifying for further schooling or studies. High drop-out rates are also detrimental to society, as the desired development of know-how and skills in the population does not occur to the extent which satisfies the political goal of "a qualified population" (Madsen, 1991b). The rate of labour-market adaptation may also be inhibited.

In spite of the large number of studies and the development of many theories, we still lack the necessary information to prevent drop-outs in an effective way (Garrison, 1987). Thus we have weakened the possibility of preventing the unfortunate individual and social consequences of dropping out.

The Empirical and Theoretical Background of the Study

Reasons for taking adult education

According to Knox (1977), most people who attend adult education courses have clear ideas as to why they are participating. Houle (1961), found three main groups of participants with different goals for their participation. These were: *goal-oriented* participants who wanted to accomplish concrete objectives later, for example changing jobs, *activity-oriented* participants who primarily have social motives for their participation, such as meeting new people, and *learning-oriented* participants without concrete goals beyond learning something (new). Skaalvik (1979) refers to several inquiries which agree well with the types of motives found by Houle. According to the Cross (1982) "*Response-chain model*" the decision to start attending adult education courses may be regarded as a consequence of one or more minor or major changes in the life situation of the person in question. Divorce is mentioned as one such a change, where the female must recommence her interrupted education or take new education to reenter the labour market. Other reasons are changes in the job situation which require new training, either to maintain the present position or for advancement purposes (Cross, 1982). These examples primarily comprise goal-oriented participation, which it is fair to assume is valid for many GKV participants. This is also supported by prior research, which shows that the final objective for taking GKV for very many students (approximately 74%), is to qualify for higher institutes of learning. This is a clear example of what Houle characterized as *goal-oriented* participation. The remainder (approximately 26%) participate for the purpose of job advancement or personal development (Oppdal Mo, 1989). As more than 60% of participants have previously graduated upper secondary education (Gooderham, 1989, Oppdal Mo, 1989), GKV will for many be a means of 1) *converting* their qualifications from vocational to academic fields, 2) changing the original composition of courses taken previously, or 3) improving previous grades.

The reason for starting adult education may thus be an interesting background variable for a more thorough analysis of the drop-out problem. This is partly because it may reveal the previous training and education experience of participants, but also because it may help the participants realize how important it is to graduate, that is to say, the negative consequences dropping out will have for their further study plans or life or work situation.

The participant's image of self and integration in the teaching environment

Previous research on reasons for dropping out has shown that participants who drop out rarely contact the teacher to inform him/her about their intention to quit (Gooderham, 1989). Correspondingly, Gooderham (1993) reports that participants who have dropped out generally have shown very little integration in the school environment. Integration in this context is defined as the degree to which the respondents think that the teachers and other participants would have reacted if they had been told that the person in question was thinking of dropping out. These results indicate that these participants feel that the teachers are not very engaged in their attendance or their fate, meaning that those who dropped out felt alienated in the teaching situation.

Other studies have told us that a not inconsiderable number of participants in adult education carry negative experiences from previous education situations. They may have dropped out of previous education or graduated with unsatisfactory grades. They may also have reading or writing deficiencies or other functional problems in their everyday life (Mezirov et al. 1975, Oppdal Mo, 1989, Gooderham, 1989).

Many participants thus return to adult education with low or weak self esteem, which might adversely affect their attitude about their own performance and their ability to cope with the school situation concerning both social and learning challenges (Skaalvik & Skaalvik, 1993). Thus there is much to indicate that the social and psychological processes that occur among participants and teachers may be important for whether a participant graduates or drops out. Positive social processes will probably be most important for participants having the most inferior self image, as these persons probably have the greatest need for support and security in the teaching situation.

Three theories about dropping out

A series of studies have been carried out to discover the reasons for dropping out. Using 30 research projects between 1928 and 1964 for their data, Verner and Davis (1964) classified the main factors given as reasons for dropping out into two main categories. These were *personal factors* which were subclassed into *socio-economic factors* (age, gender, education, income etc.) and *psycho-social factors* (motivation, intelligence etc.) and *situational factors*, which were subclassed into *school-related factors* (class size, teacher

performance etc.) and *non-school-related factors* (geographical distance to school etc.).

According to Gooderham (1989) recent theoretical research on the causes of drop-outs in adult education may be said to stem from three main groups of theories. These theories are classified as psycho-social, interactional and life-situation perspective theories (Gooderham, 1989). Common to these theories is that differences in personal qualities are regarded as important when it comes to distinguishing between those who graduate and those who do not. What distinguishes these theories from each other is the extent to which they regard participant behaviour in relation to external environmental factors and *which* environmental factors apply. *Psycho-social theories* focus exclusively on the personal qualities of participants, or psycho-social traits, as the reason for dropping out. Wilson (1989) distinguishes between those individuals who possess and those who do not possess the necessary personal qualifications to graduate from adult education courses. Social and psychological processes among the different actors in the school environment are thus excluded as explanatory variables in this perspective. *Interactional theories* regard dropping out in the light of the participants' psycho-social traits and processes in the school environment. Boshier is a central contributor to this group of theories. Boshier (1973) considers motivation for learning as interaction among internal psychological factors and external influences, or participants' perception and interpretation of ambient environmental factors, primarily the teaching situation. *Theories of life-situation perspectives* require that the total life situation of participants must be studied, so that psycho-social traits interacting with environmental factors must be studied both *in* and *outside* the school environment. A fervent critic of Boshier, and major representative of this latter group of theorists, is Garrison. One of Garrison's (1987) major complaints about Boshier is that he excludes the effect of factors outside the school environment. Garrison (1987) claims that dropping out is such a complex phenomenon that in order to say something about the reasons the whole life situation of the participants must be studied.

A General Framework for Dropping Out

From our examination of these three groups of theories about dropping out, we can discern three main factors which might be ascribed the most emphasis when explaining dropping out. Gooderham (1989) places these in what he calls "a general theoretical framework for dropping out". In this framework we find *psycho-social traits*, which might consist of personal qualities, such as self-confidence, motivation, social skills and intellectual

abilities. Furthermore, in the framework we also find *school-internal experiences*, aspects or processes concerning teaching or the learning situation such as instruction materials, the teaching style of the educator and feedback from him/her, in addition to cooperation and satisfaction among the students. Finally we find *school-external experiences* which may consist of aspects or processes of the social environment of the participants outside school, like working hours, obligations to family and the attitude that the family and friends have to education.

Dropping out has traditionally been regarded mainly as a direct product of individual factors. Gooderham, however, allows for the possibility that the effects of school-internal and school-external experiences are *indirect*, in that both affect the psycho-social traits of the participants (Gooderham, 1989). Dropping out can, in other words, be placed in a chain or cycle of causes, which may consist of the psycho-social traits of the individual, the pedagogic framing conditions and the social framing conditions which are present during the school year. In this context it is important to point out that the reason that made the participant join, meaning the objective for participation and the importance of this goal, may constitute an important factor in what Garrison (1989) terms "internal motivation".

The Issue

The objective of this study was to obtain a picture of the quality of the teacher's knowledge about and insight into aspects tied to general and gender-specific reasons for dropping out. Many of those who teach GKV are "ordinary" teachers from the upper secondary school system, often without formal background in teaching adult courses. Adult education is thus a "sideline" for many teachers. In light of this they often lack theoretical knowledge about adults in education situations and the reasons for them dropping out. Moreover, their work situation may mean they have limited involvement in the participant group. Furthermore, they will not have acquired a personal, well reflected view of what makes some drop out, while others graduate. The guiding hypothesis for this study was that if the teachers lack qualifications to teach adults, they will lack knowledge of the reasons why some people drop out. We categorize the lack of such knowledge in this respect as teacher responses which are based on subjective *assumptions* - and this will result in wide variation.

Method

The study was carried out by mail. Letters were sent to three of the largest "upper secondary schools for adults". In an accompanying letter the school administration was asked to distribute our questionnaires to teachers in Norwegian studies, mathematics and the social sciences. Ten copies of the questionnaire were enclosed with the accompanying letter, and the school administration was asked to supply the necessary number of copies beyond these ten. No reminders were sent out. A total of 23 questionnaires were returned from the three schools. Only 18 of these had been answered (minimum of one question answered). The remainder of the questionnaires had comments of the type "impossible to answer", and "too unsure to answer". Because the number of returned and completed forms was so small the data processing did not distinguish between the different schools or the subject taught by the teachers. Tables of frequency with percentage distribution were made showing computed measurement for central trends and variation for all variables. Due to the small sample and large variation none of the results were subjected to closer statistical analyses.

Results

In the following we present the results from the questions asking that teachers centre on *their own experiences* in their answers. The responses thus reflect what teachers think and believe about the characteristics of participants in GKV and drop-out causes, both generally and gender specifically.

Table 1 Educational Background of Participants

Educational background	Median:	Range:	n:
- Did not take upper secondary education when 16-19 years	60%	80	18
- Did not graduate secondary education when 16-19 years	22%	75	17
- Graduated secondary education when 16-19 years, but wants to improve one or more exam grades	10%	49	18
- Other	10%	18	5
Total:	102%		

Table I shows the distribution among four given response categories concerning the educational background of the participants. The teachers were asked to distribute 100% among four given response categories. Measured by median, teachers think that more than half (60%) of the participants have not attended secondary education previously. This is markedly different from previous studies where participants themselves had responded. These results show that for the 1985-1986 school year the group of participants without previous secondary school attendance comprises about 16%, and that the proportion has been decreasing for the last 10 years. Gooderham (1989) explains this by showing that the number of lower secondary school leavers starting upper secondary school in this period had increased from less than 70% to 95% (Gooderham, 1989). The discrepancy between what these teachers believed and what Gooderham found may, however, be explained by teachers interpreting the category "... as 16-19 years old" exclusively as meaning the "three-year general education" schooling, thus not including participants with vocational training of less than three years in the category "did not take upper secondary education while 16-19 years old". In other words, the phrasing of this response category was a little unfortunate. With a median of 10, participation in adult education in order to improve upper secondary school grades does not appear to be a significant number. The variation was lowest for this group. However, overall there was serious disagreement among the teachers. For example, the range for the most often observed category was 80. The total in the table exceeds 100% because only some respondents used the category "Other", and some teachers filled in percentages which did not total 100%.

Table II. *Participants' main motives for starting continuing education*

Main motive:	median	range	n:
- To qualify for new position in present or another organization	10%	15	11
- To qualify for future job (at present unemployed)	18%	40	14
- To qualify for further schooling or studies	70%	69	18
- Other motives	10%	10	8
Total:	108%		

As is apparent from Table II, it appears that adult education at the upper secondary school level mainly functions as a platform for continuing schooling and studies. This agrees with previous research. Oppdal Mo (1989) found for example that approximately 83% of participants intended taking further education after they completed upper secondary school for adults. However, variation was significantly lower for this question, indicating a higher agreement than for question 1. Variation was nevertheless higher than expected if the teachers' answers were based on good knowledge about the participants and their objectives for participating.

Teachers were also asked what they believed was the annual drop-out rate, and at what time of the year the number of drop-outs was highest. The median for an annual drop-out rate was 20%, with a variance range of 35. The large variation range may be ascribed to two different factors. It may reflect differences in drop-out rates among the different subjects the teachers have taught and possibly the length of their experience as teachers of adults. Measured by median the result is nevertheless significantly lower than what previous research shows about the extent of dropping out. Gooderham (1989) for example found a drop-out rate of about 39% and Skaalvik (1989) found the drop-out rate to be as high as 50%. A clear majority stated that the point in time with the highest drop-out rate was the autumn term. A total of 89.5% of those who answered this question stated this.

Table III a. Characteristics of a typical drop-out

Characteristics:	Frequency	Percentage
Difficulties in combining education and work	4	23%
Problems in private life	4	23%
Overestimated oneself	3	18%
Lack of motivation	2	12%
Unstructured	2	12%
Do not know where they are leading to	1	6%
Uncertain of themselves	1	6%
n=17	17	Total: 100%

Table III a shows the teacher responses to an open question about what characterizes a typical drop-out. The responses have later been sorted and categorized. Two equal categories of responses emerged on this question which did not consider possible gender differences. These were also the categories chosen by the majority of teachers, "*difficulties in combining*

education and work" and "*problems in private life*". Both these response categories may be interpreted as indicators of negative forces in the social environment of the participants. The category which placed second was "*overestimated oneself*". This category may, however, be regarded as a variant of the category "*difficulties in combining education and work*", meaning that they do not have sufficient time and/or the capacity to follow However, the category may also be an independent factor which may be tied to participants not possessing adequate abilities to complete the subject in question.

Table III b. Characteristics of a typical drop-out

Type of negative motivation:	Frequency		Percentage
External, tied to social framing conditions	8		47%
Internal, tied to psycho-social traits	8		47%
Other	1		5%
n=17	17	Total:	99%

Table III b shows the distribution among characteristics of participants who drop out according to a reorganization of categories of the responses based on whether these 1) mainly can be tied to negative forces in their social environment or whether 2) they have been adversely affected by their own personal qualities. After this re-categorization these two factors were equal, with a frequency of 8 each. In the category "Other" we find the response "do not know where they are leading to", which is hard to place in either category.

Table IV a. Primary reason for dropping-out

	Males:		Females:	
Drop-out reason:	Frequency	Percentage	Frequency	Percentage
Social conditions	4	27	6	37
Too high ambitions	4	27	3	19
Care obligations	-	-	3	19
Lacking subject background	2	13	-	-
Pregnancy/birth	-	-	2	12
Low motivation	1	7	-	-
Performance anxieties	1	7	1	6
Poor abilities	1	7	-	-
Other priorities	1	7	-	-
Unstructured	1	7	1	6
Total:	15	102	16	99%

Table IV a shows teachers' responses to an open question about what was the primary reason for dropping out, distributed by gender. This question partly overlaps the previous question, but the way it is phrased opens more for incorporating conditions *external to* the individual participant. The responses were sorted and categorized afterwards. As the basis here was the teachers own words, the categories are not necessarily mutually excluding. This makes it difficult to determine whether one reason was been observed more frequently than another and whether or not two categories of responses actually cover much of the same phenomenon/reason. However, as is evident from the table there are gender differences with regard to the reasons for the drop-outs. It may appear that important reasons for males are *social conditions* and *too high ambitions*. These were also important reasons for women dropping out, but for them *care obligations* were equally important as *too high ambitions*. *Care obligations* were not stated as the most important drop-out reason for males. *Poor abilities* and *unstructured* were reasons exclusively stated for males.

Table IV b. Reason for drop-out by type of motivation

	Males:		Females:	
Type of negative motivation:	Frequency	%	Frequency	%
External, tied to social framing conditions	5	33	11	69
Internal, tied to psycho-social traits	10	67	5	31
Total:	15	100%	16	100%

Table IV b is based on a re-categorization of teacher responses, as they appear in Table IV a, according to whether the reason for the drop-out mainly may be tied to external or internal negative motivational factors influencing the participants. Table IV b shows that for females it appears that drop-out reasons tied to the social environment occur twice as often as reasons tied to psycho-social traits. For males it is the opposite, drop-out reasons tied to the social environment occur with half the frequency of reasons tied to psycho-social traits. This happens in spite of the two most often occurring response categories in table IV a being "*social conditions*" and "*too high ambitions*", that is one from each of the two combined categories.

Previous research indicates that the majority (approximately 50%) of participants who had dropped out had been affected by external negative motivational forces outside the school situation. These ascribed "*no time to take part in teaching*" impertance for not graduating. Unfavourable aspects of the school situation and psycho-social traits were also stated as important by approximately 25% of participants (Gooderham, 1989). Thus there is a certain distance between the findings of Gooderham (1989) and what these results indicate regarding reasons for dropping out. Generally this concerns teachers not stating aspects tied to the school situation, in other words the importance of personal qualities, especially for males.

Table V *Frequeny of suggested possible drop-out reasons, distribution by percentage*

Drop-out reason:	x̄	median:	n:
Insufficient abilities	4.8*	5.0	17
Insufficient or lacking motivation	3.4*	2.5	16
Poor or lack of contact with other participants	2.8*	2.0	17
Poor or lack of contact with teachers	2.8*	3.0	16
Priority given to competing obligations/activities instead of education	5.3*	5.5	16
Lack of support or encouragement from family/friends	4.3*	5.0	15

* This figure indicates average value attached to the individual suggested reason, based on a 7-step Likert scale where 7 equalled very often and 1 equalled very rarely

Table V shows how often teachers believed six suggested drop-out reasons were present. In order to measure this, a seven-step scale was used where seven corresponded to "very often", one to "very rarely" and 4 "at times". Of these reasons for dropping out, two were examples of psycho-social traits, two were examples of pedagogic framing conditions, and two were examples of social framing conditions. Measured by median (5.5) it appeared that "*Priority given to competing obligations/activities instead of education*" is the most frequently occurring reason. The most infrequently occurring reason is "poor contact with other participants", with a median of 2.0. Processes among participants and between participants and teachers appear, based on this table, to play an insignificant role as a reason for dropping out. This does not agree with Gooderham's (1989) findings which show that very many of those who dropped out felt alienated in relation to both other participants and teachers. Unfortunate social framing conditions appear to comprise the most important reasons for dropping out, as seen by these teachers.

Table VI: Reason for dropping-out distributed by gender

		Males:		Females:	
Reason:		Frequency	Percentage	Frequency	Percentage
Insufficient abilities		8	73%	-	-
Insufficient motivation		2	18%	-	-
Not given priority		1	9%	10	91%
Lack of support		-	-	1	9%
n=11	Total:	11	100%	11	100%

Table VI shows the distribution of responses according to which of the reasons for dropping out given in Table V teachers believed to be most typical of males and most typical of females. In Table VI there are clear gender differences with regard to the reasons for dropping out. For males it appears that aspects which are often tied to personal qualities, that is abilities and motivation, play important roles for dropping out. These two reasons for dropping out are, however, not mutually exclusive. Declining motivation may easily be the result of a participant feeling that she/he lacks sufficient ability. On the other hand, motivation may have major ties with support or encouragement external to the individual. Thus motivation increases or decreases depending upon support and encouragement, or the lack of this. For females it appears that forces in their surrounding environment may have greater importance, that is giving less priority in relation to other duties and lack of support. Moreover, these are two conditions which are not mutually exclusive. This is because a lack in support, perhaps the lack of help with household chores, may lead to schooling being given less priority in favour of these chores in particular or other work tied to the traditional female care obligations.

Discussion

The extensive variation found in this material, in addition to somewhat radical discrepancies from previous research results, may be interpreted several ways. Perhaps the variation can be partially attributed to the fact that teachers generally are very uncertain about characteristics of participants in GKV, the extent of dropping out and possible reasons for dropping out. The responses given may thus be based more on guesswork,

subjective assumptions or myths than on factual knowledge. However, the results may also reflect differences in the subjects that are taught and possibly the number of years the teachers have been adult educators. Alternatively different interpretations of the opinions in the given response categories and the interpretative variety in teacher response to the open questions explain some of the variation.

Besides the variation, another common trait of teacher responses with the first three questions is that they differ radically from what we know from previous research. Nevertheless, if the results reflect either the uncertainty of teachers with regard to central characteristics like *educational background* and *goal for participation*, or that the participants are such a heterogenous group, there is reason to question how teaching can be adapted, or how good *adult teaching* may be exercised on the basis of such a background.

Together with the above-mentioned reservations this indicates that teachers do not possess the factual knowledge which is required to give valid answers. What I mean by factual knowledge is reflections about one's own experiences, concrete information about participants or theoretical knowledge about the subject of this questionnaire.

A common trait of what teachers believe and think about dropping out, measured through open questions, is the absence of reasons which may be tied to unfavourable pedagogic framing conditions. This applies even when this was one of several optional response categories. This is still remarkable even though differences in the measuring method and in the way questions were asked make it impossible to compare directly with Gooderham's (1989) findings. It must, however, be remarked that Gooderham (1989) interviewed participants some time after they had dropped out. Their responses may thus contain varying degrees of rationalization, meaning that the weight given by the participant to conditions external to him- or herself, such as work situation and the educational environment, may reflect a desire to avoid blaming oneself as the reason for dropping out.

That teachers attach little or no importance to educational framing conditions may indicate that teachers do not have a very conscious perception of the importance of the processes occurring among the participants and between the participants and themselves. In other words they may have limited their role to merely being responsible for teaching, thus lacking information about participants and their perceptions of themselves and factors in the pedagogic environment. This interpretation may be supported by one of the teachers who under the response category

"*poor contact with teacher*" commented "how can I say anything about that?".

Another fact that supports the suspicion that teachers do not have thoroughly reflected ideas about the drop-out issue is that the given response category we find as the next most important drop-out reason is "*Insufficient abilities*". In the previous open question the corresponding category (categorised after the fact) "*Poor abilities*" is one of the *least* important (and only given for males). Also the fact that many respondents did not answer the question about what was the most important drop-out reason for each of the genders, contributes to reinforcing the assumption that the drop-out issue is not given much consideration or reflection by teachers. That seven out of 18 did not answer this question can hardly be understood as anything other than an expression of great uncertainty.

However, if one chooses to disregard the major limitations present in this data material, an interesting pattern with regard to reasons for dropping out in relation to gender may be apparent. Based on the concurrence between the responses to one open question with the responses to a question with given alternatives, it appears that there are differences in the reasons for dropping out which follow a traditional gender role pattern. Men may appear to estimate their resources somewhat highly, so that during the course they no longer are able to follow up their own intentions and drop out, in one or more subjects. Women, on the other hand, appear to trapped by demands from their close environment with regard to care obligations. This may also be reflected by the fact that the response category "*social conditions*" is only given for females. Women may be vulnerable to demands from their closest environments because of their care-function obligations. Thus their participation in education may appear to lose in the competition with their social family functions. Women thus drop out because of their lack of resources seen in relation to the time and energy they have to cope with not only their own needs, but also those of others. The latter point can also be supported by reference to Table VI, where "*lack of support*" is given only for women. This *may* indicate that lack of support takes the form of family members not sufficiently reducing their care demands.

These results also emphasize some of the methodical challenges one faces in analyses of such a complex phenomenon as reasons for dropping out. This applies especially to using fixed response categories, but also to the interpretation of open questions, as the requirement for mutual exclusion between categories may be hard to satisfy in both cases. This is due to the fact that apparently several disparate factors interact in such a way that it

may be difficult to point out the one in favour of the other and/or isolate them from each other as reason(s), both considering existence in time and in quality. The respondents' choice of response category may bear considerable signs of being a random selection. Secondly it also becomes difficult to categorize the respondent's answers to open questions as these may be based on assumptions, or they may relate to other factors/nuances beyond or in addition to what is stated, and they may not be immediately apparent to the researcher. A further challenge is to minimize the extent of rationalization with regard to reasons for dropping out, which is something that applies to both participants themselves and their teachers. Both groups may, each in their own way, need to attribute decisive importance to external "uncontrollable" factors as the reason for dropping out, instead of their own personal qualities and behaviour.

Conclusion

The results of this study may principally be interpreted as confirming the guiding hypothesis, that teachers' background information about the characteristics of participants and the reasons for dropping out are inadequate for their responses to have sufficient validity. This might indicate that the communication between researchers and study subjects has not been good enough. Either the explanation of the research has not been good enough, or the teachers have had too little interest in this issue, or alternatively, they work under conditions which do not permit or encourage further studies in the topic of this study.

Teachers are thus not well suited as respondents to acquire insight into the reasons for dropping out of GKV. This matter gives rise to the question concerning the need for "professionalization" of this group of "adult educators". By professionalization I mean compulsory training based on research results and psychological, educational and sociological subjects (theories) relevant to the work areas of these teachers.

Even if the data are unsuitable for statistical conclusions, and the validity is limited, it appears that there are gender differences in the mechanisms affecting the GKV drop-out rate. It thus seems possible to explain female drop-outs by the fact that they are more subject and vulnerable to competitive demands than men because of their roles as care givers, especially the demands from their closest environments. The reason for male drop-outs may, on the other hand, lie in the fact that they take on too much, while not being sufficiently motivated to keep going under the subsequent pressures they face. This may imply that they might be short on

abilities and short on the work capacity required of them. Thus it appears that men are less subject and vulnerable to demands from their closest environments, that they themselves are the real threat against accomplishing their original goal, graduating the education. The results of this study also show that reasons for dropping out may be categorized as *internal* (personal qualities) or *external* (social and educational framing conditions), which agrees with Gooderham's framework for dropping out. As previously mentioned, and which also this material may be taken to indicate, external factors probably do not affect participant behaviour directly, rather indirectly. They may contribute to inhibiting or reducing the individual's motivation for reaching the original goal, if the *costs* of participating in education become too high, in other words, if the external framing conditions are unfavourable/negative to start with, or change in an unfavourable/negative direction in the course of the school year.

We can thus state that the key factor in the chain of reasons behind dropping out for both genders is motivation, but to this we can add that motivation cannot be understood without also studying the positive and negative forces in the environment around the individual which affect him/her and which directly and/or indirectly affect his/her motivation. Therefore in order to understand, predict and, last but not least, prevent people from dropping out of adult education, we need reliable knowledge about the interaction among individuals, gender-specific and possibly age-dependent motivation structures and external framing conditions in and outside of the school situation. For this to be possible we must analyze the drop-out issue as broadly as possible in order to distinguish between necessary, contributing and adequate reasons for dropping out in and outside of the school. This will also require that participants are studied over time so that changes in both external and internal factors may be observed.

References:

Anderson, R. & Darkenwald, G. (1979). *Participation and persistence in American adult education.* New York: College Entrance Examination Board.

Boshier, R. (1973). Adult participation and dropout, a theoretical model. In *Adult Education*, 23 (4), pp 255-282.

Cross, K.P. (1982). *Adults as learners.* San Francisco: Jossey-Bass inc.

Garrison, D. R. (1987). Dropout prediction within a broad psychosocial context. In: *Adult Education Quarterly*, 37 (4), pp 212-222.

Garrison, D.R. (1988). A deductively derived and emprically confirmed structure of factors associated with dropout in adult education. In *Adult Education Quarterly*, 38(4), pp 199-210.

Gooderham P. (1989). *Hvorfor faller de fra?* Trondheim: Norsk voksenpedagogisk forskningsinstitutt.

Houle, C. (1961). *The inquiring mind.* Madison: The university of Wisconsin Press.

Knox, A. B. (1977). *Adult development and learning.* London: Jossey-Bass Publ.

Madsen, Bjørn-Emil (1991). *Kartlegging av deltakelse i kommunal og fylkeskommunal voksenopplæring i skoleåret 1990 - 1991.* Trondheim: Norsk voksenpedagogisk forskningsinstitutt.

Madsen, Bjørn-Emil (1991b). Livslang læring '90-årenes utfordring. I *Studienytt* (5-6), Oslo.

Mezirov, L., Darkenwald, G. og Knox, A (1975). *Last gamble on Education: Dynamics of Adult Basic Education.* Washington, D.C.:Adult Education Association of USA.

Mo, T. Opdahl (1989). *Voksne i en utdanningssituasjon.* Trondheim: Norsk voksenpedagogisk forskningsinstitutt.

Skaalvik, E. (1979). *Rekruttering til voksenopplæring.* Trondheim: Norsk voksenpedagogisk forskningsinstitutt.

Skaalvik, E. (1980). *Voksenopplæring i Trøndelag.* Trondheim: Norsk voksenpedagogisk forskningsinstitutt.

Skaalvik, E. og Skaalvik, S. (1993). Selvopfatning og forventninger: sentrale motivasjonsfaktorer i voksenopplæring. In V. Haugerud & J. Kvam (red): *Livslang læring en antologi om voksenopplæringens mangfold og enhet.* Trondheim: Norsk voksenpedagogisk forskningsinstitutt.

Verner C. & Davis G. S. jr. (1964). Completions and Droputs: A review of research. In *Adult Education* - Spring 1964, pp 157 - 175.

Wilson, R.C. (1980). Personological variables related to Ged retention and withdrawal. In *Adult Education,* 30 (3), pp 173-185.

THE ILLITERATES AND THE SLOW LEARNERS

Out-of-school Processes of Knowledge Constitution

Juan Carlos Llorente

Department of Education
University of Helsinki

Abstract
The present study is focused on everyday knowledge and task-oriented problem solving at work with adult illiterates or adults with little schooling. This is a qualitative and exploratory study. Problem solving is linked with the problem-situation formulation. Evidence of subjects' everyday knowledge, actively constructed in work-related activities, is presented. The theoretical basis of the study is Piagetian Genetic Epistemology and Psychology.

The study is aimed at opening vistas for transforming the disregarded potentialities of adults with little schooling into real tools for intervening pedagogically. Accordingly I believe that the knowledge and understanding of adults with little schooling may be utilized in so called formal settings as well.

1. Introduction

Theoretical and practical inconsistencies that I have observed in the field of adult education oriented my interest towards a basic study to approach, within out-of-school contexts, the particular modes of knowledge-constitution and problem-solving situations of adults with little schooling.

I interpret, based on Piagetian Genetic Epistemology and Psychology, that the everyday knowledge or out-of-school knowledge that the subjects possess should constitute the starting point of any pedagogical intervention. Thus, how to intervene pedagogically starting from something we do ignore? What is this knowledge constructed in everyday life like? (Ferreiro 1987; Nunes 1993; Llorente 1991.)

To this end I have concentrated on three working contexts: a) building work, b) rural work and c) domestic work, the latter involving domestic help and

housewives. Within each one of these settings I have considered some specific practices for analyzing e.g. the building an octagonal corner, the pruning of fruit trees and the preparation of jam.

Therefore, I focus views both on solving task-oriented problem situations, as a particular mode of knowledge constitution, and on the constituted knowledge the subjects possess and use for carrying out everyday work-related tasks.

In my opinion, the importance of this analysis resides: (a) in the empirical verification of a theoretical postulate, that is, the empirical identification of an epistemic and psychologically active subject. (b) Another aspect is the implication of this empirical evidence in regard to adult illiterates. Thus, this implies potential participants in educational practices and is directly linked with how to deal with them when intervening pedagogically. (c) A third importance is that the study was conducted in out-of-school social settings, such as in workplace, not traditionally privileged as settings that facilitate the construction of knowledge. At least, the out-of-school knowledge is usually not seen as something that could later be developed in other social settings, such as in school.

In this paper I present two cases which may help to understand illiterates´ natural ways of understanding and performing in everyday settings. In my view, this is as well a crucial theme to rethink the pedagogical intervention in formal settings.

2. Sample and methodology

I made an exploratory study to construct the object of study. Piagetian clinical interview was used to construct and clarify the hypotheses and the theoretical framework.

The sample consisted adults from suburban and rural areas of the city of General Roca, Province of Río Negro, Argentina. The ages ranged from 20 to 60 years. The school experience of the target group varied from zero to four years of schooling.

In the exploratory stage 13 interviews were conducted and in the final stage 21 interviews. In the analysis I took into consideration the total sample of 33 subjects. This was possible because of the homogeneity of the total sample.

Three stages of the methodological process may be distinguished:

1) The first stage: formulating the problem. Different phases were defined within this stage by progressively enlarging the research lines.

2) The second stage: a standstill in data-collecting to analyze the data already obtained. At this stage, I was confronted with new possible hypotheses which constituted the widest realization of the research problem. Simultaneously, the gathering of approaches was classified on two different organizer axes to define the main aspects to be included in final clinical interview. At this point in the process key informants were consulted about certain labour practices.

3) The third stage: conducting the final clinical interview. Though the interview structure was followed, the clinical characteristic of the interview permitted the rephrasing of questions and to ask more in depth questions, when necessary.

3. Knowledge at work

The interaction of the subjects with determined situations or objects implies a structuring activity by the subject upon the reality. As a result of this interactive process, the subject and objects are transformed. Thus, the origin of the knowledge is not to be looked for either in the objects or in the subject, but rather in the interactions between the mentioned subject and the mentioned objects (Piaget and García 1982; Llorente 1994).

From some positions, a status that transforms knowledge into a simple practical knowledge or knowledge in action is granted to the knowledge used in task-oriented working situations. Thus, it is a question of empirical knowledge (Mezirow 1981, 3-4) governed by technical rules. Though from this position it is accepted that instrumental actions always involve some organizing activity on the part of the subject, the activity is limited in this learning domain to predictions about observable events which can be proved correct or incorrect. In other words, everyday thinking is viewed as governed by efficiency rather than the full and systematic consideration of alternatives (Rogoff 1984). Thus, it is explained that knowledge utilized for practical problem solving in everyday situations would be tacit knowledge, that is, knowledge available in the relevant setting rather than by relying on explicit propositions. In the same way, Mezirow refers to knowledge as being deduced from rules of value systems and from rules of investigation.

In turn, I would contend that everyday thinking, or what is termed instrumental learning, is governed by both efficiency and a systematic consideration of alternatives. Therefore, I consider that efficiency would be linked to the contextual constraints. On the other hand, in my view, the knowledge evidenced in work-related tasks is seen throughout the subjects´ organizing activity of the situations as interfaced in a particular social setting. Thus, I stress the constructive activity of the subjects and the assimilating progressive character of everyday knowledge.

In any case, practical knowledge or everyday knowledge, interpreted as instrumental learning, may rapidly be transformed into contextualized knowledge. That is, knowledge then becomes bound to the content and the situation from which it was deduced or acquired. In this regard, I would like to point out that such a determinism leaves fairly little room for the subject´s activity.

Other studies (Nunes and Shliemann 1993, 107), focused on reversibility and transfer in the schema of proportionality and developed in everyday contexts, bring forth a different perspective for considering everyday knowledge. They proved that the concept of proportionality, learnt in everyday practices, can be applied in new situations. Thus, this result contradicts the hypothesis that everyday knowledge may be so entangled with the situational relations that it cannot be applied in other situations or social settings.

I shall analyze a work-related situation in which the action that mediates the interrelationship between the subjects and the objects or situations appears systematically as a transforming action through the assimilating and accommodating processes.

Case: Building an "*ochava*".[1]

Lorenzo is 49 years old. He attended school as a child until the 2nd grade. He has been working as a building worker for many years. Though he doesn't have labour stability, he does work on contract.

I: Well...why don't you tell me, Lorenzo...?
In making the "ochavas"... What do you do?

---

[1] An octagonal corner of a house.

S: Well, it's very easy. You look for the square. Right?
The square is the same on one side as on the other...You know the measurement of the "ochava", right? Like the corner.
So much for the back and the same here. And there it crosses.
That is, it crosses the "ochava". Then it has to work out. If this is in a square, of course the "ochava" has to work out.

I: And how do you make...? I mean, if this forms a square, how do you know that the other one forms a square?

S: Well, because of the line-up of the stakes... How is it? It may be municipal... The stakes are there to guide you.

I: That's good.

S: You put down one stake here, another one there, right? And this is the guiding one and that's it. If you have 6 metres along here, you have 8 there, it has to give you 10 here. That's the form.

The construction of an octagonal corner does not seem to present great problems for Lorenzo. He is aware that the square must be created first. This means that an angle of 90 degrees must be set, though he does not refer to it as such. In this regard, he explains that in order to know the measurements of an octagonal corner the leading stake should be determined. He refers to the leading stake as the vertex from which he can apply the measures. However, when he was asked how he knows that a square had been created, he justifies it by referring to the municipal stakes. This does not actually explain how a square is created.

The municipal stakes, that mark the limits for building, are used in this case as determiners for applying the measurements, in other words, to delineate the exactness of the square. When Lorenzo refers to the measurement 6-8-10 in his explanation he does not present them in just any order, but in the correct order. He is using a kind of formula and also applying it correctly. That is, he measures from the leading stake 6 on one side and 8 on the other, to obtain 10 in the third side. Thus, these measurements, though provided by the social setting where he works, are interpreted by him not only for developing work-related tasks but for explaining about the square, as in the interview I am analyzing.

I shall present the next paragraph of the interview where I change the measurements in the formula initially presented by Lorenzo.

I: I have been told that there is a formula they use for making the "ochava" that's called 3-4-5. Do you know it?

S: Well, no, no, until now, no. I don't know why it´s 3-4-5?

I: The truth is that I don't know it very well, but I´ve been told about...

S: 3 like this, 4 like this and 5... I don' know...it might be.

I: How would you then tell me it is?

S: But if you have 3-4-5, one part may be shorter on one side than the other...

I: Let's see, how does that work?

S: Of course, for example. If 6-8 and 10 are exact, it's because that makes a square, right?

I: 6-8 and 10?

S: Of course. 6-8...it has to be 10 here, doesn't it?
Because it's a square. Now...

I: How do you know it has to be 10 here?

S: Well...because if you take a paving tile, let's suppose, and measure it...I don't think the paving tile is a bevel square.

I: No

S: Well, I don't think the wall tiles are either.

I: No. That's true.

S: Well, if you measure this, and then you measure this, that gives you 10 cm, let's say, from here to there; where you mark if off it is the same as this...If you measure 6 cm here, 8 cm there. Right?
What it gives you there...then you know if it is a square or not.

It is interesting to observe that when I presented the same formula but with other measurements he could not immediately relate it to the one he uses. And the first reaction was to point out that by applying 3-4-5, one of the

sides would be shorter, as if it were different when applying 6-8-10. I might interpret that this answer denotes that Lorenzo was not aware of the relation of measures that he presents with the formula 6-8-10. Thus, rather than understanding the tool he uses, i.e. the formula, he just applies it mechanically. That is, the possibilities for Lorenzo to adjust a square seems to be exclusively related to the learnt formula. However, what is not entirely consistent with this interpretation is that he still insists, in this paragraph, to justify the relations and exactness of the measures 6-8-10. He now does it no longer by using the explanation of the municipal stakes, but instead by referring to the paving tile to prove his thesis. Though the paving tile is quite common in building work, it is not necessarily used for building an "*ochava*". Consequently, Lorenzo is transferring to another content a formula learnt to be applied in building an "*ochava*". He is empirically proving a thesis learnt and applied in a certain situation and applying it to another situation. I shall present the next paragraph of the interview where I brought back the formula 3-4-5 that Lorenzo could not initially relate to his own.

I: So then...the formula they had told me was 3-4-5

S: Ah...It's the same, it's clearly 3-4-5. It's the same, it must give you a square in the same way.

I: Lorenzo, so you learnt this in practice?

S: Study, I couldn't study, so...

I: Well...Are you sure that they always are in those proportions, you cut 6 here, 8 here, and it is always 10 there?

S: It's logical, as it can be 12-16 and 20, right?

I: And why do you think it always is like that?

S: Well...because...it's an exact measurement.

I: I see.

S: It's an exact measurement for a square. Of course. And if it is not squared, everything will be a bevel square, even the roof, and the floor, everything will turn out to be a bevel square. Where the floor is put in, it will turn out wrong, and where the roof is made, for example of zinc or whatever, it will turn out badly. Well, that's it.

Now Lorenzo could realize that the formula 3-4-5 is the same as 6-8-10, in that both make a square. This is quite important because it is clear that he is applying proportionality. He used a scalar solution and could present still another way to calculate a square, i.e. the formula 12-16-20. What he could not explain was the mathematical relation that makes these formulae, with different measurements, result in a triangle with a right angle.[2]

In this dialogue, Lorenzo concludes the clarification by saying that it is an exact measurement, and cleverly remarks that it is in the exact measurement for a square. That is, these formulae would not be exact for constructing an obtuse angle of 95 degrees. Then he went on to explain the contrary. He describes the consequences when starting with a false square. What he shows is that a global view of the whole activity is taken into account. There is a structuring of the situation, as well as an identification of the conditions.

Throughout the dialogues presented, Lorenzo gave quite remarkable validations for the formula he uses, i.e. municipal stakes, paving tiles, different measurements and the consequences of a bevel square. Though all these are empirical justifications, I understand they denote not only the organizing activity of a subject but the proportionality notion and the geometrical notion of a triangle with a right angle. Furthermore, this knowledge and cognitive activity does not seem to be tied to the task from which it might be deduced.

4. Task-oriented problem situation at work

The focus is on an analysis of the main elements which define the problem situation, the relations between them and, their characteristics. The strategies and procedures involved in problem solving for explaining developmental aspects is not my concern, but rather the general characteristics of problem situations at work. Thus, I am approaching the questions related to problem formulation.

In general, referring to task-oriented problem situations, it could be said that these situations are of *significance to* the subject. When a *task* is accepted but the person does not know how to carry it out and its solution involves surpassing a *cognitive obstacle* for achieving *success.* Furthermore, I stress the interactive aspect of task-oriented problem situations. In other words, any struggle for understanding the situation should be considered in a

---

[2] I invite the readers themselves to explain this formula mathematically.

dynamic way. Thus, the phenomenon should be viewed as a dialectical set of relations which cannot be assessed by analyzing isolated elements either theoretically or empirically.

The analysis I develop is rooted in epistemological constructivism. Thus, problem solving situations are regarded as interactive processes linked with the fundamental aspects of knowledge constitution. In this regard, it is worth recalling that knowledge and its constituent mechanisms are neither performed in the genes nor in the environment, but are actively constructed by the developing individual (Piaget 1985; Saxe 1991).

This particular interactive process takes place within particular social practices, i.e labour practices. Among the multiplicity of interactions and social nets that determine a particular social-cultural context, e.g. building workers and rural workers, some of them require a problem-solving process and others do not. The work routine may provide the basis to easily solve task-related problems. However, the routine is broken when a certain event cannot be faced without reorganizing the task. Thus, a particular situation is taking form when the routine task needs to be restructured. There is the original state, when the restructuring of the task has been accepted by the subject, and there is the successful state, when the intervening elements are accomplished. Then the mediated solving process for narrowing down the distance between both states is determined by a process of inclusion-exclusion. That is to say, from within a broad field of given possibilities, a success-oriented process is developed. Yet this process may involve cognitive obstacles in its different moments.

The significance given to this new situation should be viewed by both the context and the subject. The event that breaks the labour routine may be overvalued by the social context, i.e. peers, supervisors, employers, when the development of the work as a whole is being threaten or depends on the solution. Meanwhile, the subject, whether knowing it or not, would be in a different position to reorganize the task.

Consequently, situations become of significance for determined subjects within specific social practices. We may very well think how far a worker may signify a mathematical problem proposed by a researcher in contrast with one that breaks her/his labour routine.

The task the subject accepts to carry out is constituted by a structuring activity on her/his part, through which a set of actions unfolds according to the cognitive schemes possessed by the subject. In doing so, the subject may face obstacles that s/he has to surpass to reach success.

The subject may assess and solve the problem situation through the cognitive schemes s/he possesses, or may need to constitute new schemes for solving the problem.

Moreover, the success - that consists of solving the problem - is strongly determined by the subject's recognition of success and by the recognition obtained from other subjects as well as from the social practice in which the problem arises.

The structure of a problem situation

Certain general characteristics of the problem situation exist that remain invariable throughout the different situations presented by the subjects. These characteristics permit me to identify elements possessing stability which I interpret as the *structure of the situation.* These elements are: the subject, the objective elements of the situation and, the social context which appear constraining the solution of the problem situation.

In the majority of the cases the subjects refer to a problem situation and its solution describing different aspects I have found possible to analyze through three general variables. My aim is not to present these variables as ready packages for understanding problem-solving situations. Instead, the aim is to present them as devices to be unpacked and integrated in a global analysis of the complex weave of relations involved in the situations to be analyzed.

I shall present a case in which these elements appear to determine the solution process. It refers to a rural worker who had been asked to describe work-related problem situations.

Case: Pruning fruit trees

> *Bernardo is 44 years old, went to school until the 4th grade as a child and lives in a suburb located in a zone of "chacras"[3] together with his family. He has been working as a rural employee for more than 25 years. He showed enthusiasm during the interview.*
>
> E: Tell me Bernardo, sometimes when you are working, do you have any problems?

---

[3] Chacra = small farm in Argentina in colloquial language.

I: That I would not know...?

E: For example...

I: Well, sometimes there are plants...there are branches: "I want to take that away" and then one doesn't dare. Because if you have a big branch and you take it away wrongly, you ruin the plant. Then that is a problem.

E: And how did you deal with that situation?

I: Well, I went and asked the engineer: "Look, to me this branch is in the way, (Bernardo relates what the engineer said to him) "Look, Anguita (Anguita is Bernardo´s surname), if we can take it away, we shall do it or we can shorter it here and here" (Bernardo approaches a plant and marks two possible cuts and continues explaining to the interviewer) Because one works with the ladder all year round and this branch is in my way now, if I leave it, it will be in my way for another year. The ladder has a pole that has to be put between the branches, then if that branch is in the way, you have to cut it, because if you don´t, you can't put the ladder there.

E: And if you could not have asked the engineer?

I: What happens is that there are companies that don't let you take away thick wood and others that do, because they like you to shape... that is called to shape the plant. For example, there are years when one has to shape the plants. You see, the branch bothers you and you cut it away. That is in case you are asked to shape the plant. On the farm, not only do you have to prune, one has to know the plant. (...) For example there are plants that you..., that are not pruned. You have to leave them or cut them with a handsaw, not with scissors. That is the fine fruit, cherries, and someone who doesn't know what to do, goes and uses scissors and dries the plant.

For example, we have parts here...to cut plants with an axe, cut it with your hand saw, yes. Work it a bit, but the scissors no. The scissors are poison for that plant.

a) The *subject: an adult solver*. Bernardo anticipates different possibilities in relation with the task to be developed. These were anticipations directly related to successfully completing the task. He wonders about the consequences of cutting a branch or not. Bernardo foresees the passing of

time from one year to another and the growth of the plant. Yet he goes over the difficulties that not cutting a specific branch may generate for pruning the following years. Nevertheless, there seem to be particular requirements set by the employers that Bernardo takes into account to decide his strategy i.e. the arming of the tree.

In short, he shows an organizing activity of the situation which seems constrained by objective elements and by contextual requirements. Thus, it does mean a procedurally successful set of actions bound by the intervening variables of the structure, i.e. the social context and OES.

b) The *objective elements of a situation.* There is a clear differentiation in relation to the type of plants. The whole task considerably changes if it is a fruit tree (apples, pears etc) or a fine fruit (cherries, apricots etc.) In both cases, different kinds of instruments are required. It is not possible to prune fine fruit trees with scissors, says Bernardo. In other words, the use of the instruments themselves constrain the task and the success in the situation.

Furthermore, Bernardo refers to the pruning to be done in traditional fruit production[4]. He says quite directly, if the fruit production had been by cordons, the problem he presented would simply not exist.

c) The *social context.* Some companies accept pruning thick branches while others give priority to the arming[5] of the plant to facilitate the harvest of fruits, though the distinction whether or not to cut thick branches is quite a general way of defining different tasks. But, when it is clearly accepted by the worker and the supervisor, the distinction might simply determine the field of task. However it does not seem to be the example Bernardo presents. Nevertheless, he needs to ask about it. Consequently, the availability of the information needed to develop the task, in the right time and space, constrains the solution. In any case, this should be seen in connection with the punishment imposed on the worker when making a decision different from that of the supervisor.

Shifting the focus now on to the worker, we see that the knowledge Bernardo had about pruning shows keen experience in this particular labour practice.

---

[4] Traditional fruit production means that the branches of the fruit trees grow freely. Production by cordons means that the branches of the fruit trees are interwoven through wires that serve as supports as they grow.

[5] The arming of the plant means to take off those branches which latter might bother the harvesting of fruits.

Bernardo is in a position that differs from that of a novice to approach this particular task.

Dynamics in the Structure

Up to now, I have presented the three constituent elements of the structure, and I have justified the need for their inclusion in analyzing the structure as a whole. I shall present an interpretation of the dynamics of the structure, that is, the relation between the structural aspects of the situation with its particular features and requirements when analyzed in interaction. To this end, I identify different possible areas in the solution process that may help to interpret and to design problem situations. They are the *success area* and the *broad field of the given possibilities.* I sketch in Figure 1 the relation between different components, in which each area would determine the interactive process between them.

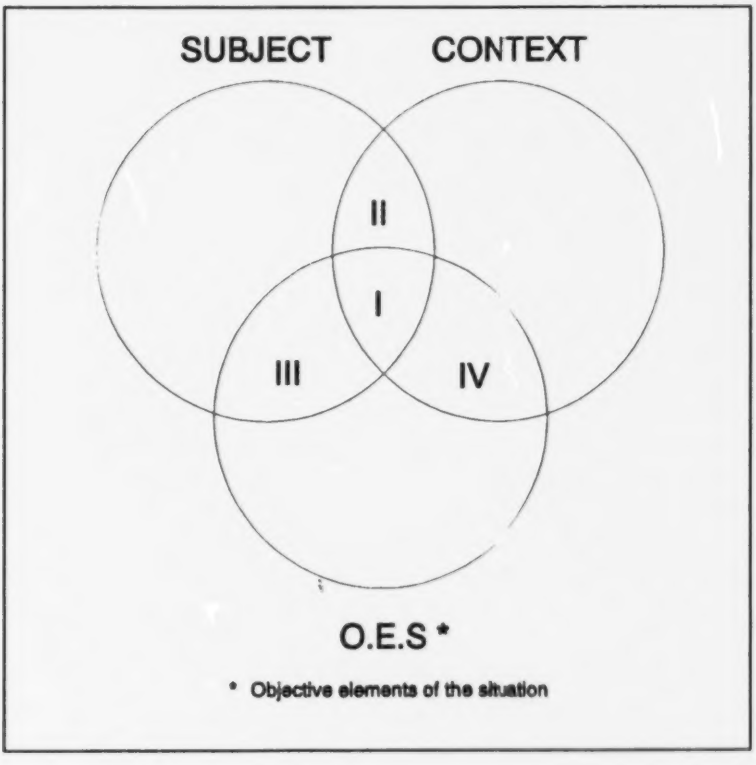


Figure 1. Integration of elements task-oriented problem situation

a) The success area

This area might be interpreted as the arena to successfully solve the problem situation. In this area, the successful solution task is achieved when the organizing activity of the subject, the contextual requirements and the OES successfully lead to a solution. I am interpreting *success* as the state reached by a task developed, not only from the subject's point of view, but from her/his structural cognitive level, while considering the very requirements of the context and the properties of the OES.

What could be regarded in this area - and only in this one - is the issue of the interactive process maintained by the three elements. Success is achieved when the solution strategy is accurately unfolded by the worker according to the employer's expectations, e.g. to arm the plant instead of improving productivity, and regarding the characteristics of the OES.

We may hypothesize a solution, from the subject's point of view, in disagreement to the contextual requirement. In this case I would say that there was no success in the solution task, though the task would have been correctly developed by the worker. There was a possible solution, but it was not accepted by the employer. Consequently in analyzing the situation as a whole the conflict still persists.

The same would occur if we were to consider such a case in relation to the OES, that is, where no success is achieved but a solution for the subject might exist disregarding the properties of OES, e.g pruning fine fruit trees with scissors. In this case, we can observe, on the one hand, that damage is produced to the tree because an incorrect instrument is used for pruning and, on the other hand, that it is expected that the work supervisor will not accept the task developed by the worker.

Let us observe the effects from the social context: when no agreement can be reached, there is no success. For instance, although Bernardo correctly structured the procedural success, there is no availability of the necessary instruments - simply in time and space - for developing the task e.g. a handsaw or scissors. And though the contextual requirements and the subject´s acceptance to develop the task as required by the context can be accomplished, there is no way to succeed.

b) The broad field of given possibilities

I define the areas II, III and IV as the *broad field of given possibilities*. Within this area, a dynamic process of inclusion-exclusion starts. Different

strategies may be imagined and still attempted in particular situations. In graphic terms (Figure 1) there is a narrowing movement towards area I. In a way, it is precisely in this area that we may certainly identify the problem situation. If we move out of this field, there is no necessary link between the elements. Then no problem may be characterized.

It is within this field that the task is anticipated and structured by the subject. Thus, to narrow the distance between the original state and the success state, it is not a question of the subject's cognitive competencies being considered in isolation, nor the social significance given to the situation, but accomplishing the three variables in interaction.

5. Concluding remarks

Though much work has been developed to address problem-solving processes, it was mainly done to explain the developmental aspects of the cognizant subject. Different research approaches were adopted e.g. cross-cultural studies, situated learning, and so forth; and theoretical backgrounds were applied, e.g. cognitive psychology, psychogenetic traditions, socio-historical approaches. However, a conceptualization of problem situations is still lacking. Studies on problem solving were mainly conducted to verify or study themes linked with psychological developmental aspects (Karmiloff-Smith 1984; Nunes 1993; Saxe 1991; Colivaux and Divar Ure 1989). That is, problem solving was used as an intermediate useful tool for studying other questions. Yet it is rare to find studies focused upon problem solving itself. Consequently, a characterization of problem-solving situations remains to be made as an event distinctive from those in which no problem-solving process is required.

I have presented two cases that reveal that subjects with little schooling and performing work-related tasks display sets of actions structured by an organizing activity of the task. I have tried to give an account of an active subject when developing work-related routines. I refer to the subject's constructive activity. Thus, work-related tasks are actively developed by the subjects, if not relying on explicit proposition, at least with a huge awareness of what they are performing.

The utilization of information available in the social setting is observable according to the particular work-related task. However, I interpret it as the assimilatory process that the subjects experience when interacting with given objects or situations. Thus, there is a transformative process at work on both the subjects and the situations intervening in the developmental

processes and knowledge constitution. Therefore, the information is assimilated into the cognitive structure and at the same time the structure is accommodated to the particular features of the real event (Furth 1969).

Nevertheless, in all the cases I have studied it is possible to observe that the subjects with no great difficulties described work-related problem situations through the presentation of explicit and well-structured steps for solving the situations.

In relation to the interpretation I have presented about the structure of a task-oriented problem situation, what is still lacking is the clear identification of the cultural variations from case to case, in terms of the intervening culturally-developed systems of signs. That is, what I expect to have shown with the case dealt with are the constraints under which the interactive process of solving should be seen. In other words, these constraints between subject, context and OES do appear in different work-related tasks and settings as invariant to consider in problem formulations.

I would like to bring up the question of problem formulation from another analytical perspective. Differences are established among problem situations whether they involve uncertainty or not (Kitchener and King 1990, 164). Even though I have focused on task-oriented problem situations, I have tried to demonstrate that success is achieved when the three elements I have brought into consideration are accomplished, i.e. the subject, the social context and, OES. Then, I would interpret that uncertainty governs any kind of problem situation to the degree that uncertainty becomes a particular characteristic of a problem situation. In my point of view, the distinction presented between well and ill-structured problems fails to take into consideration the decisive role of the social context in fixing parameters in the task solution, therefore constraining the possible solution. I would claim that problems, similar to some of those I have presented in the cases analyzed are mathematical problems. However, I would say that both the strategies for solving them and the ways of presenting the necessary mathematical understanding to solve them would not be interpreted as correct in formal settings. The certainty argued by Kitchener and King, governing the mathematical problems, serves to probe whether a certain solution is mathematically correct or incorrect but not to probe that it is successful. That is, as soon as we place a solution procedure in a particular social setting, the success is achieved precisely when the strategy used and the final product (or result) becomes recognized by the social setting as successful. Thus, I claim that the lack of parameters for identifying success in the solution procedure is brought out regardless of the very influence of the social context within which the solution must be anchored.

I would sum up my position by stressing the need for developing an understanding of the interplay of the three elements I have presented, characterizing task-oriented problem situations for the purpose of problem formulations. This should be directed to take into account to what degree each of these elements constrains the successful procedure and particularly the success in the situation.

On the one hand, I understand as crucial both the examination of the actions required for developing the task and the characteristics of the final product (or result).

On the other hand, the examination of the cultural variations that constrain the successful procedure from one setting to another should be considered, that is, how culturally-developed systems of values and signs influence the formulation and evaluation of task-oriented problem situations.

Finally, I would like to emphasize the necessity and challenge to unite theoretical and practical efforts in order to face the discontinuity between both the natural ways of formulating problems and constituting knowledge and the ways to intervene pedagogically.

References

Castorina, J.A., Lenzi, A y otros (1984). "Psicología Genética: aspectos metodológicos e implicaciones pedagógicas." Buenos Aires, Argentina: Editorial Miño & Dávila.

Colinvaux and Divar Ure (1989). "Trabajando con Adultos no alfabetizados: La construcción de la noción de espacio." In *Problemas de Psicología Genética*, by Castorina, et al. Buenos Aires, Argentina: Miño y Dávila.

De Vega, M. (1985). "Resolución de Problemas." In *Introducción a la Psicología Cognitiva.* Capítulo IX, 493-514. Barcelona, Spain.

Ferreiro, E. (1987). "Conceptualizaciones Matemáticas en Adultos no Alfabetizados." México: Centro de Investigación y de Estudios Avanzados del I.P.N.

Freire, P. (1972). "Pedagogy of the Oppressed." Translated by Myra Bergman Ramos. London: Penguin Books.

Furth, H. (1969). "Piaget and Knowledge. Theoretical Foundations." New Jersey: Prentice-Hall, Inc.

Karmiloff-Smith, A. (1984). "Children's Problem Solving." In *Advances in Developmental Psychology, Vol. 3.* Hillsdale, New York: L.E.A.

Kitchener, K. and King, P. (1990). "The reflective judgment model: Transforming assumptions about knowledge." In Mezirow, J. 1990. *"Fostering Critical Reflection in Adulthood."* (159-176), U.S.: Josse-Bass Publishers.

Llorente, J.C. (1991). "Los saberes cotidianos de Adultos Analfabetos". Universidad Nacional del Comahue. Secretaría de Investigación, Argentina.

Llorente, J.C. (1994). "Constitution of Knowledge and Problem Solving at Work". Licentiate Thesis. Department of Education, University of Helsinki.

Mezirow, J. (1981). "A Critical Theory of Adult Learning and Education." In *Adult Education, Vol.32, Number 1, 3-24.* New York.

Mezirow, J. and Associates. (1990). "Fostering Critical Reflection in Adulthood". U.S.: Jossey-Bass.

Nunes, T., Shliemann, A. and Carraher, D. (1993). "Street Mathematics and School Mathematics". U.S.A.: Cambridge University Press.

Piaget, J. (1957/71). The Myth of the Sensorial Origin of Scientific Knowledge. In *Psychology and Epistemology*. Translated by A. Rosin. New York: Viking.

Piaget, J. y García, R. (1982). "Psicogénesis e Historia de las Ciencias". Mexico: Editorial Siglo XXI.

Piaget, J. (1985). "The Equilibration of Cognitive Structures. The Central Problem of Intellectual Development". Translated by Terrance Brown from *L'équilibration des structures cognitives.* U.S.: The University of Chicago Press.

Rogoff, B & Lave, J. (1984). "Everyday Cognition". Its development in social context. London: Harvard University Press.

Saxe, J. (1991). "Culture and Cognitive Development: Studies in Mathematical Understanding". London: LEA, Publishers.

Slow Learners

Marianne Andersson
Thomas M. Dyekjær
Jakob Wandall

The Danish Research and Development Centre for Adult Education

Abstract

"Slow learners" are a relatively small group of young people in the "grey zone" between normal and mentally deficient youngsters. They have always been there, but not until recently have they become visible - partly because of society`s increased demands of education and capabilities.

Some Danish continuation schools have "specialised" in slow learners, and it have been possible to start a positive development for many of the young people who have earlier experienced many defeats and thus have a very low self-esteem. The schools focus on "soft qualifications", i.e. qualifications such as sense of responsibility, reliability, ability to co-operate and the ability to adapt to new conditions.

The students should succeed, no matter where they end up. They should be taught social competence making them able to live a life which suits the individual person. This article presents some of the main results of an evaluation of the continuation schools` work with these young people.

There are 225 continuation schools in Denmark. These establishments, which provide education for young people between the ages of 14 and 18, are considered as an alternative way of finishing compulsory education. A small percentage of these schools have special education courses tailored for a group of young people known in Denmark as slow learners.

In 1990, Ole Vig Jensen, who was Minister of Culture at that time and is now Minister of Education, established the Council for Educational Development Work for Young Slow Learners. This council was allocated 38 million Danish kroner to improve the conditions of young slow learners. The majority of the money was used to improve equipment and educational

environments in continuation schools which especially target this group of young people. In principle, the evaluation is aimed at the facilities on which the money has been used. However, since these facilities form only part of the picture and cannot be separated from the schools in general, in practice the task has been to describe the students and evaluate the work of the schools for slow learners as a whole.

Who are these slow learners? How many are there? What is the reason for their slowness to learn? Where are former students to be found today? How do they themselves evaluate their time spent at school? What characteristics do these continuation schools share? What alternatives are there to continuation schools? What view do the schools have in terms of the students' educational and work opportunities?

These are questions which will be answered in this evaluation, which has been carried out by the Danish Research and Development Centre for Adult Education.

Who are these slow learners?

Even the name "slow learner" is only an approximation of a relatively recent Danish concept. Only a few Danes are familiar with it and practically no foreigners really know what the term covers. However, we all know these people: We have all gone to school with them, most have one in their family and many people meet them every day at work.

Slow learners do not have much in common: They are perhaps best characterised by their dissimilarity, though slow learning is primarily a question of literacy.

The reason why they have suddenly become the object of scrutiny -that the term has been developed - is the fact that skills involving literacy are in increasing demand, both in *Folkeskolen* (the Danish municipal primary and lower-secondary schools) and vocational educational training. The concept is new but the people it describes have always been there. In former times they got jobs as unskilled workers after leaving lower-secondary school. The fact that they are often invisible is partly a consequence of their ability to hide their problems.

Several attempts have been made to define the group "young slow learners". One definition is: "Young people whose handicap is not visible - and it is in itself a handicap that you cannot see that anything is wrong." Another

definition is based on an aspect of education: "Young people who cannot fulfil the academic requirements of the ordinary education system - but on the other hand cannot realise their developmental potential with the offer of a career for the handicapped." In other words, young slow learners are the "grey zone" between normal and mentally deficient youngsters.

Slow learners are behind, but to very differing degrees: Some catch up with their peers at a later stage, others do not achieve this. Some are slow learners from early childhood: They are late learning to crawl, walk and talk. For others, slow learning is something that doesn't develop seriously until they reach school age. Slow learning is not an illness, but as with many other things, illness can lead to slow learning.

The reasons for it are plentiful: Social problems (at home, school, etc.), psychological problems, brain damage, lack of stimulation during childhood, physical problems (bad motor skills, handicap, etc.) and learning difficulties are just a few examples. Slow learning often results from a combination of these problems.

However, (academically) slow learners often have positive qualities and are interested in practical work. Many of those who have been (academically) "behind", make up the difference at a later stage.

The fact that more is not done for slow learners is partly because this group is not larger. Slow learners' own, and their parents', opportunities and wishes when it comes to attracting attention are limited. It has been estimated from an analysis of the number of former students from the relevant continuation schools, that the percentage of young people who are slow learners is 2½% - 4% of a school year. This equals between 2,000 and 3,000 on a national scale.

Educational opportunities and experience

Gradually, as the group "slow learners" has become increasingly separated in public debate, interest surrounding it has become more intense, especially in terms of education. This has resulted in the implementation of a wealth of projects and special education schemes, varying greatly in form and content, throughout Denmark. Several target the so-called "remainder group" i.e. the third of each school year who do not get a job and/or vocational educational training.

Many projects and initiatives consist of a combination of education, work experience and work, often also involving training in household skills. A few of these have been selected to give an impression of the overall activities.

At three continuation schools, educational courses have been established which are outside the activities of the continuation schools themselves. The Practical Assistant's Education, established in affiliation with Tolne Continuation School, is a training and education programme containing work-related and personal care training. At Mejlby Continuation School's department in Stenild and Fenskær Continuation School, activities are closely linked with the schools' half-way accommodation and domestic/household skills elements. Short periods of training combined with long periods of work experience are designed to create a link with working life. The students live in shared accommodation.

The Danish model, which separates slow learners as a group in its own right, is like that of no other European country. The one that most closely approximates the concept is the English term "slow learners". Many of the projects underway in other European countries originate within religious groups and often have strong local attachments. A general problem faced in these countries is the large amount of time and energy needed to raise funds which allow operations to continue.

The continuation schools involved in Denmark are of the opinion that this group of students should have educational and job opportunities on an equal footing with everyone else, and that the schools and their courses must in no way come to characterise a welfare scheme. This is an important difference in relation to other countries in Europe.

Continuation schools and educational theory and practice

The philosophy behind the work of continuation schools is that education must be based on each individual student's strong points. If a student can overcome his limitations in one area, this will create a general belief that it is also possible in other areas. Consequently, the young person experiences success. This encourages self-confidence and thereby creates a basis for breaking down some of the barriers of attitude ("I can't, so I don't want to try"), which are often described as important obstacles when considering a new challenge.

Work with slow learners started in about 1980 at 5 - 6 continuation schools. Since then, between 1 and 3 schools join in every year. The continuation schools emphasize that the boarding school concept is especially suitable for teaching this type of young person.

The schools vary considerably and each individual school offers a long list of educational courses for slow learners. This should enable individual students to find a school which suits their needs and wishes.

The schools' physical environments vary - from an old converted rectory to newly-built schools designed for the purpose. This means that the students' living conditions also vary considerably depending on the school i.e. the number of students to a room etc. varies. The majority of students at one of the schools live at home.

Conditions surrounding the selection of pupils are described as important, since the mix of students means a great deal in terms of a good, qualitatively responsible level of educational theory and practice; continuation schools take considerable care to put together a year group so that it will function happily. This is seen as the opposite to social projects, which are more concerned with looking after young people who cannot be placed elsewhere. Some schools are exclusively for slow learners, while others mix slow learners with "normal" students. The number of students at these schools range from 11 to 120. There are almost twice as many boys as girls, and the girls are often "slower" than the boys. Many boys who are slow learners do not begin to really develop until they are 18, and many schools take the view that legislation should "stretch" in terms of age.

The schools have a large number of workshops of many different kinds. These range from agricultural and fishery workshops to media and textile workshops. A large proportion of the daily teaching takes place in these workshops, where students learn both to master the relevant skills and acquire knowledge of a more general nature. A main component of the educational theory and practice used is that with each single task, the student acquires some knowledge and learns to appreciate a wider perspective. Responsibility is also acquired from this constant exchange of theory and practice.

The educational theory and practice used by the schools is based on the individual student and his or her abilities. Each student should be able to live an independent and active life; for some this will mean an education and job, for others it will mean the ability to cope with daily life independently. Great emphasis is placed on students acquiring what the schools call "social

competence". At under half of the schools, the opportunity exists for students to take the Leaving Examination of the *Folkeskole* but it is stressed that this is not compulsory. Completing a process is more important.

The schools can be divided into two groups with regard to aims for slow learners; those that emphasise the importance of students getting work after their stay at the school, and those that think it more important to teach young people to live a meaningful life without work.

The schools focus on teaching the young people "soft" qualifications, i.e. to be punctual, dependable and reliable. These are taught partly during work experience, training in household skills and at half-way accommodation. Such qualities are seen as necessary for a young person to function happily at work.

Work experience is used in the vast majority of schools. Normally this lasts for one or two weeks, but at a few schools it lasts for longer periods. A number of schools believe that legislation does not take account of the fact that these students need longer-term work experience.

Grants allocated by the Council for Educational Development Work for Young Slow Learners to individual schools range from approx. 300,000 Danish kroner up to 1 million Danish kroner. Such grants have mainly been used to build major facilities, and the schools have assessed that the result has been an important rise in the quality of the teaching.

Over one half of the schools have expressed that they have students who are affected by problems involving their parents and homes. As a rule, cooperation between the school and home is described as good, but some schools would wish to do more, if the resources were available. Other schools see continuation schools as a link in a young person's progression towards freedom and independence. This is a completely new - and sometimes painful - process for many parents to accept and therefore contact with parents is limited to some degree.

Almost all students leave school with a plan for their future, but in many cases contact then dries up. Several schools have former student days which are often very popular and well-visited.

Former students

In many areas, this survey is the first attempt made to describe this multi-coloured, varied field of research. Of course, different types of research, surveys and reports have been carried out involving young slow learners, but these have been based on an angle of approach of a psychological/educational nature. This report is based on methods of a more sociological/statistical orientation.

One of the main objectives of this investigation has been to survey the situations slow learners find themselves in after leaving continuation school. The light shed on its effect is based primarily on the evaluations given by former students, combined with testimony from employers who have come into contact with these young people during their work experience.

The material has been collected via a postal questionnaire, and those who have not answered have then been interviewed by telephone. All former students who had been assessed by the schools as belonging to this target group, and had left one of the schools between one and three years previously, were sent a questionnaire. 83% of those who received one answered, and students from schools for very slow learners did not answer systematically worse or less often than those from the other schools. The replies were assessed as being reasonably representative of the young slow learner group as a whole. This material is supplemented with a number of "portraits" (qualitative interviews), for the purpose of "giving faces" to the numbers. The young people interviewed have been carefully chosen to represent a spectrum of slow learners, and they have been used as the background for the economic analysis described later.

Over one half of the former student are taking an education, and 3 out of 4 have been part of an educational program after leaving continuation school. The institutions at which they recive their education represent a wide spectrum. The four most common are: Technical schools (16%), other continuation schools (14%), apprenticeship/student places (11%) and agricultural/home economics/or marine schools (9%). Compared to other young peoble in the same age group, there is not a great difference in educational activity, but former continuation school student often take advantage of other types of educational opportunities (e.g. a great deal more train in general subject than avarage).

Work experience is vital ingredien in the majority of continuation schools' educational theory and practice. Two out of three students have had work experience, though often for only a short period (1 or 2 weeks). A trend

does, however, indicate that youngsters who have had longer work experience are thought to have had the most benefit. An attempt has been made to shed light on this impressin from the other side: The company providing work experience. Two schools - one with very slow learners, the other with slow learners - provided the names of 3 to 5 work experience employers who had been used several times.

A number of interviews were carried out, and even though the differences are considerable, the statements share some features:

* Longer-term work experience is generally seen as by far more valuable than short-term - both for the employer and trainee. Until the trainees have been with the companies for 1-2 weeks, they do not function properly at work. After this, their efforts at work are assessed as more valuable, and if their work experience is valued by the employer, it is correspondingly more beneficial for the continuation school student.

* Motivation is a prerequisite for success. So, it is important to find a work experience opportunity which suits the young person's wishes, needs and abilities. In most cases work experience is most effective when the trainees do not have direct contact with customers, and the other employees know something of the young person's situation.

* The students from the school for slow learners always coped better with work experience than their more handicapped counterparts from the other school. And when compared with work experience trainees from *Folkeskolen*, one employer said the continuation school students "really took part in production and really tried to help to the best of their abilities". The others "come to kill time. They are not especially interested in what we do and are content just to watch the large machines."

Both work places said they had benefited from having the trainees - often on a social level ("Everyone is really pleased to have the trainees and they look forward to them coming. It gives a breath of fresh air"), but also in terms of work. All those interviewed would happily continue to welcome trainees from the continuation schools, and the employers do not deny the possibility that these young people could get normal jobs at a later date.

Economy

Continuation schools are - in relation to the law - non-profit-making institutions. They are financed primarily by state grants, and municipal and

county grants as well as a small percentage of money paid by parents. The amount allocated to Denmark's 225 continuation schools in the 1993 Budget was 885.7 million Danish kroner.

Even in terms of the burden slow learners produce on society, these young people differ widely, though they are categorised under the same group heading.

In order to show this disparity, the economic calculations are based on a model which divides this group into four in respect of the personal portraits mentioned earlier. The categorisation has been carried out on the basis of information collected in connection with school visits, interviews and the questionnaire survey.

The group categories used are as follows:

Group 1 are people who are unable to live alone, though they could possibly live in sheltered, shared accommodation. They could not function in a normal work environment even doing a simple job. They have a considerable need for adult contact and support in both educational and work situations. They cannot follow educational courses founded on academic elements.

Group 2 are people who are able to live alone, possibly in sheltered or shared accommodation. They would have difficulty coping in a normal working environment, but can often carry out simple jobs, possibly under supervision or guidance. They will seldom be able to complete actual basic vocational education and training - as the Danish educational system is today - but would benefit from courses and elements of the basic education currently available.

Group 3 consists of people who can function in their own homes without noteworthy problems and can master an uncomplicated job on normal terms. Typically, these people have trouble completing basic education without extra effort in terms of educational theory, practice and guidance.

Group 4 consists of people who leave continuation school with qualifications equal to those of their "normal" peers. People in this group function normally i.e. in their own home, and participate normally at work or in education, typically taking an apprenticeship or Basic Vocational Education Course.

Using this categorisation, economic portraits have been drawn for each of the above groups, and the cost for society has been calculated for a young person from each of the groups at different points in their lives. A reference sequence has been used for comparison. For instance, a 9-year *Folkeskole* (municipal primary and lower-secondary school) education with special education from the age of 6 would cost approx. 1.7 million Danish kroner for a person from group 1, but 315,000 Danish kroner for a person from the reference group.

The price of an education at continuation school also varies, since according to section 19, subsection 1., remedial lessons are available. A stay at continuation school with 6 weekly remedial hours costs 102,000 Danish kroner - 49,000 Danish kroner without the remedial lessons.

After continuation school, these young people cost society different amounts. A person from group 1 is assumed to live at a vocational and residential institution, while people from groups 3 and 4 are assumed to live in their own home and begin work as unskilled and skilled workers, respectively. A person from group 2 is assumed to be receiving the second of the three voluntary early retirement pensions available, to live in partially-sheltered, shared accommodation and have a job under the 1/3 scheme (two thirds of their salary is subsidised by the state).

Another scenario for a group 2 person might be that instead of receiving early retirement pay, the person might be employed in the private sector as part of the 40/60 scheme (60% of their salary is subsidised). This would result in a considerable public saving.

If time spent at continuation school results in a person from one group being upgraded to a higher group, this would also mean a public saving. For example, a change of group from 1 to 2 (with the 40/60 scheme) would mean an annual saving of approx. 250,000 Danish kroner. In other words, the expense of continuation school with 6 weekly remedial hours is recovered 63 times in the course of a person's working life.

In many contexts it has been shown that such a change of group is achieved during a person's stay at continuation school.

Perspectives

As mentioned previously, opinion differs amongst continuation schools as to students' opportunities for being able to cope on the labour market. Is it

realistic to expect slow learners to be able to cope with the fierce competition for jobs? This is a vitally important question to ask, since the aim of the educational activities depends on this point. This can be illustrated from several angles: How are former continuation school students coping today? What qualifications do employers value? How does one actually go about finding a job?

If you look at how slow learners cope - in terms of work and education - in relation to the average, there is, perhaps surprisingly, no great difference: There are slightly fewer in education among slow learners in the youngest age groups, and slightly more in the older age groups. There are also slightly more slow learners in the youngest age groups with jobs, and slightly fewer in the older age groups. The former continuation school students receive social assistance benefits and pensions, whereas their counterparts receive unemployment benefit.

However, slow learners have many different types of jobs (typically unskilled work, often subsidised), and the educational opportunities they choose are more general and practical in nature and rarely constitute complete vocational education and training. This is partly due to the academic requirements. There is, however, no disputing the fact that a relatively large proportion of slow learners find work and use parts of the educational opportunities offered by the established education system.

As previously mentioned, the continuation schools emphasise the importance of giving these young people what they call "soft" qualifications. Analyses carried out in other contexts show that employers also judge these qualities to be important. Subject-orientated qualifications appear low down on their list of requirements, and the five most sought-after qualifications from a private employer's point of view when employing unskilled workers are responsibility, quality awareness, precision, conscientiousness and reliability. Based on this, there is reason to believe that slow learners stand a good chance on the labour market.

However, is this enough? What about ability to adjust, initiative and overall perspective? - areas which often cause problems for slow learners, and which have increasingly become standard requirements on an employer's list of employee qualities. In many contexts, qualifications are required which slow learners cannot attain, but there are still many jobs which do not require such skills. One employer related a story about a former continuation school student who had started his job interview by saying that he could neither read nor write. He received the reply: "Yes, but you don't have to - you just have to work!". This young person still cannot read or write but has become

a valued employee at the painter's workshop where he works. The head of department at the Grundfos sheltered workshops, which are integrated in production, also has only good things to say about slow learners as a labour force.

However, if requirements for being taken on depend on a well-formulated written application and certified proof of vocational education and training, slow learners will rarely be given the chance to show their capabilities.

For this reason, it is important to note that a major share of unskilled (and skilled) young people get a job by visiting the place of work - possibly after contact has been initiated by family/friends/ acquaintances. By actually appearing in person, they create a good impression and can show themselves to be responsible, reliable and dependable. There are many examples of how slow learners can also master this form of employment procedure.

With these points in mind, it would be tempting to conclude that there is no reason to make a special effort to help this group of young people. This, however, would be a interpreting too much into the facts. As previously mentioned, slow learners are characterised by their difficulties with literacy. Literacy is increasingly becoming the "way in", a criterion for sorting applications, for all forms of education within the framework of the established education system. Lack of literary skills can, therefore, mean that the avenues to better qualifications in many other areas also become closed. This is why it is judged to be essential that new means to an education are developed if slow learners are also to have the chance to realise their developmental potential in the future.

Often the "correct" educational opportunities for slow learners are referred to as a third education or third avenue - a new education system designed to function on a parallel with the existing system. Numerous attempts have been made with practical-orientated, individually-targeted educations under this heading. Often with success. There are many advantages inherent in this approach, but there also looms a danger in creating a major, coordinated education system for those who do not "fit in" with the normal education available. There is a danger of stamping a person using this form of education system as third class.

The question is, whether it would be more practicable to adjust the existing education system, so that others as well as slow learners could use it to full advantage. In this context it might be seen as most appropriate to reassess the limits of what is defined as education, to achieve greater harmony between ostensible and actual competence, and develop more opportunities

for linking the "building blocks" of the existing education system to form new educational courses. Certain opportunities - such as those named by the continuation schools as important - may be lost. However, there is no systematic obstacle preventing these from being added to the long and varied list of educational opportunities which are already available in Denmark.

A great deal can be done to improve conditions for slow learners. Some improvements would be free, but most would cost money. Increased input would, however, also result in savings in other areas. Essentially, this issue rests on a political decision and order of priority concerning the lengths to which one will go and the direction which is to be taken.

DISTANCE EDUCATION

342

From Information Technology to Thrilling Sources of Learning

Gunnar Grepperud

University of Tromsø

Abstract

This article is based upon the growing interest in distance education that we have been witness to in Norwegian higher education during the latter years. Based upon experiences from this development the article shows how a fascination for technology has been a strong driving force in the awakening of interest for distance education. Further the article explains which strategies the Norwegian Executive Board for Distance Education at University and College Level (SOFF), has used as a basis for their work towards integrating technology and education. Based upon Norwegian experiences with technology in higher education the article concludes that technology as a tool will be an important attribute in realizing society's aim for a highly qualified society.

Distance Education - A field of educational development

It is said, with a certain reservation, that it is almost impossible to create change in the teaching practice of higher education. Perhaps this is true, especially due to the tradition-rich university culture where one is strongly influenced by the ideals of the original mother institutions founded during the Middle Ages. Good teaching, and therefore also good learning, one believes, is linked to the lecture form, to authorative monologues within the framework of an auditorium and an educational institution.

With this as our point of departure, one can rightly state that the Nordic higher education institutions are in the process of exciting development both with regard to interest in, and work with teaching and learning. It is a change which does not manifest itself through a sudden marked engagement by our university and college staff in educational matters. Rather that one can see small, but noticably positive changes with regards to this question.

And if we look back on the 400 years of stability which characterizes our universities, any cautious changes are in fact an indication of radical reorientation. A number of reasons can be given for this development. This change can partly be related to the questions surrounding study quality, which is acquiring constantly a more and more central position. This in turn has something to do with the kind of students that are at present entering our universities and colleges and the demand for greater effectivity, better quality and a quicker completion of studies.

An equally, if not perhaps a more important reason, is the growing interest for distance education, or "flexible, open, distance learning", as it is called by those who wish to capture as many shades of meaning as possible. It is not just a coincidence when one of our prominent Science Professor's in a jubilee interview in one of Norways most influential papers used most of the allotted printing space to talk about distance education, technology, learning and the new exciting challenges awaiting us. Neither is it a coincidence that a number of our Norwegian educational institutions have given both priority to positions and resources for distance education.

From my position as leader for SOFF (The Norwegian Executive Board for Distance Education at University and College Level) it has been interesting to follow the development of distance education over the last three to four years. From being an anonymous, partly non-existing phenonomen it has become, in a short number of years, an activity which has increasingly been focused upon. During this period, Norwegian universities and colleges have, for example, developed and carried out 62 different qualifying educational offers. In some subject areas, such as History, one is in the process of developing the course so that students can complete their History education up to a post-graduate level. In the future higher distance education in Norway will partly contain traditional subjects up to post-graduate level, as well as courses for groups requiring specific competence in their field of work.

The development of distance education in the Nordic countries seems to have similar trends with regards to profile and organization. None of the Nordic countries, for example, want to establish an Open University like those in the United Kingdom, Spain, Portugal, Germany and Holland. Instead it is stressed that the development and execution of distance education programmes should be based in the higher education institutions we already have. This is what is called a dual-mode model. Norway has, through the establishment of SOFF, developed a central unit to coordinate the work with distance education at university and college level. A similar central unit is proposed for Denmark, "The Electronic College" (Den elektroniske

Højskole), while in Sweden after a number of investigations, they seem to have decided to form a syndicate of the most active universities and colleges.

Technology as the Driving Power

We can give a number of reasons why distance education, and also teaching and learning has come into focus lately. Through a number of inquires in Sweden, Denmark and Norway clear educational political signals have been given that a future concentration on distance education will be an important area of development. To quote the Norwegian Minister of Education, Gudmund Hernes, "We are on the brink of a situation where education will develop from being a phase of our life to being a lifestyle." In other words, the perspectives for life-long learning has reached higher education. This means, amongst other things, that in the future higher education will play a more central role in adult education and further education, something which will challenge the present-day organization, economic dispositions and methods.

In life-long learning distance education will be a necessary tool in realizing the educational political ideals. This places great expectations upon the potential of distance education. To put it precisely, politicians hope that distance education will give less expensive education, give better quality and reach more people. In Norway the emphasis on distance education can be seen in connection with the reorganization of colleges. The idea behind this being that two rather contradictory ideals, centralization of educational institutions and decentralization of competence, can be achieved.

Just as important as the political signals themselves, is that they are given concrete financial support. Often interest is created through finance rather than through idealistic, educational political perspectives. In Norway the Royal Ministry of Education, Research and School Affairs have since 1990 allotted 33 million Norwegian Crowns (about £3 million) to distance education at university and college level. In Sweden the emphasis has been on supporting a number of larger projects, for example the University of Umeå, which during a five year period was given 30 million Swedish Crowns (about £3 million) for a qualifying project in collaboration with seven local authorities. In the autumn of 1993 the Swedish Government planned to use about 90 million Swedish Crowns (about £9 million) to distance education projects and distance education students.

A third reason for the growing interest in distance education, and perhaps the most relevant is the interest in technology or a fascination with technology, if you like.

There seems to be general agreement that without information technology's development distance education would still have a rather anonymous existence, or be regarded as second-hand education. Technology has both given this form of education a higher status and created a renewed interest way above the traditional distance education circles and burrowed itself deeply into public higher education.

The increasing interest surrounding technology, both in education and within other sectors of our society, creates discussion and different points of view.

On the one side there is a great expectation as to what can be achieved through information technology. Perhaps especially in a technological environment, and amongst those who work with media there is to be found a great deal of enthusiasm for media's possibilities. The problem is that technology's possibilities are way ahead of educational practice, so that at times one feels that technological solutions are on the look-out for educational problems. The result is quite often that it is technology, or the media, that lays down the terms for how one wants to organize an educational programme, not the target group, subject or the educational aims. In a report about higher education in Norway in 1988 one meant, for example, that through the establishement of a *Norwegian electonic knowledge network* one would be able to give adults equal access to knowledge, insight and skills no matter where they lived in the country.

In the Danish report into the organization of distance education, they did not use the term,' distance education', but used instead, *technology supported teaching*. The connection between technology and distance education is at times so near that for many there is a tendency to muddle them up. The previous Director for NKS- Distance Education, Erling Ljoså, has given a good example of this. After showing a visitor round NKS, which is one of Norway's oldest and largest distance education institutions, he was confronted with the following question, " Has NKS thought about beginning with distance education?". When Erling Ljoså remarked with some puzzlement that that is what they did in fact work with, the visitor continued, " Yes, yes, of course, but I meant video and such like."

On the other side we have those who are sceptics, perhaps at the moment the majority. Those who are sceptical to distance education cover a divergent

group of people, from those who would still prefer us to be using feather pens as the only educational tool, to those who want to take the subject up to a critical, constructive discussion and testing. The problem with criticism and scepticism is that it is often often wrapped up in generalizations, for example, one often speaks with pathos of the need for human fellowship, about sterile machines and alienation. Unfortunately it is often teachers, no-matter at which educational level, who evaluate technology as an expression of a perverted society. It is with regret, that as far I am concerned, little of their criticism can be characterized as good, basic critical reflection about the relationship between technology and the society we live in. Much of it can be regarded as rather stereotyped, which can mainly be traced back to three sources; that one is generally incompetent about or afraid of using technology, that one knows very little about this field and has little interest in finding out about it or that one has an economical interest in preventing the use of technology. There are a number of examples where teachers are averse to recording their lectures on video because they are afraid of losing their cut in the profits, if it is copied and distributed outside their control.

After saying this it is necessary to stress that a serious basic discussion is important, and that one must take heed that one does not land in the other trap, that of uncritically embracing all kinds of technology. As in so many other situations one must also here follow the guilded middle-way. Or as nutition experts say, "Remember you can have too much of a good thing!".

A Strategy for the use of Technology and Technological development in Norwegian Distance Education at University and College Level

The establishment of SOFF can partly be seen as an attempt to accomodate the positive challenges information technology places us in. It was expected that SOFF would work more consciously towards the aim of strengthening the connection between education and technology. It was with this expectation that SOFF's staff was recruited from a practical pedagogical mileau.

SOFF's strategy can be regarded as threefold:

1 SOFF's economic support to distance education projects should be used for professional/pedagogical development and not for the purchasing of technical equipment.

It has been a premise that educational suppliers (that is the universities and colleges) should make use of the technology they already have. There are two reasons for this. Firstly the institutions giving higher education, before SOFF was established, had provided themselves with official state grants in connection with information technology programmes, which required technological equipment. So that SOFF should not be regarded as a continuance of this programme it was important to define a pedagogical profile.

The principal reason is, nevertheless, linked to the disparity between technological and pedagogical development. While we are witness to an enormous technological development and where one almost daily discovers new and exciting possibilities, very little has anything to do with teaching and learning. It is no exaggeration to state that in teaching one has hardly learnt to use the most elementary technical assistance. Anyone who has experienced the use of an overhead projector in a teaching situation would be able to agree with that. It is also necessary to walk before trying to run, something which in this case means that one should learn to make use of the simple, and every-day type of media in a learning situation before one attempts to go over to more advanced technology. It is also important not to jump over simple steps of development, something which again means that we must accept that education will always be a step behind, but going in the right direction. The consequence of such a development will be that one discovers, amongst other things, that the most tecnologically advanced equipment is not necessarily the best if one wants good learning results. We have still not made full use of the pedagogical possibilties of the more simple technological equipment such as, for example, the telephone.

In this perspective lies also the philosophy that if technology is to be used it must be adapted to the user. One should therefore, as far as SOFF is concerned, not use technology or media that the user is unfamiliar with or has little chance of having access to. Here one is talking about using an,' every-day type of technology' put to use in a teaching and educational context. Such a perspective is, as far as we are concerned, a necessity if most people are to use technology as a natural and normal assistance in their studies.

2 All experimenting with technology should take place within an educational programme.

As a continuance of what has been said previously, an underlying fact is that the testing of technology is not an aim in itself. It is important that one in a testing and development phase has a somewhat realistic attitude towards

what technology's role can be within the framework of an educational situation. With the limited resources that SOFF has at its disposal it is important that they are used to support concrete educational programmes. This is especially important as long as SOFF's main aim is to contribute to establishing distance education as a natural part of higher education's total educational offer. One must not find oneself in a similar situation to that which has, for example, happened in EU's DELTA-project, where one initiates many projects, which may be of interest as far as they go, but which give few results as far as practical educational politics is concerned. In the future work with DELTA-projects the main stress will be upon implementation.

3 Cautious testing of new possibilties.

To the extent that one will try out new technology's possibilities within the framework sketched out above, one must be aware at all times of what the consequences will be for the majority of students. At the present moment this seems to be comprised of two possible solutions; more weight on dialogue (i.e. between teacher and student and student-student), and an ever growing ability to combine audio, visual and text material within the framework of one medium, which is collectively known as, 'multimedia'. The videotelephone is in the process of being put into general use and CD-ROM/CD-I technology is at present being introduced onto the commercial market.

4 Stress upon evaluation and research.

It is said, not without a certain portion of irony, that researchers at universities and colleges research everything other than their own organization. Let us hope that distance education will be an exception to the rule as far as distance education is concerned. SOFF has stressed the need for evaluation of both the process and the product and hope that the projects that have received grants from SOFF will be assessed both externally and internally. To help with this work SOFF has produced an evaluation guide as a basis for the evaluation of projects. The guide contains some general comments and advice about how to evaluate and gives common themes that projects are required to collect information about.

Technological Experiences from Distance Education in Norwegian Higher Education

As part of our work we have, amongst other things, collected information from application forms where different reasons for wanting to use media is presented. Here are some of them:

- One is the possibility of distributing subject material quicker and in different ways. For example through satellite distribution a lecture can be followed by many people in different parts of the country at the same time.

- As regards to the pedagogical reasons for using technology, we can divide them into two main groups:

  a) Partly it has to do with putting traditional teaching methods into a technological context, for example that one gives a lecture in front of a camera instead of a group of students in an autitorium. In fact we can, as in the Bible, talk about "pouring fresh wine into old wineskins.".

  b) Partly it has to do with exploiting pedagogical or learning potential, in other words utilizing the possibilities that are not so easy to realize within a place-bound, traditional teaching situation.

     Many have views and hopes about this, but it is not always that easy to define what the potential really is. Often there is a tendency to produce various wordy assertions that have little to do with the actual teaching situation. This situation is in no way helped when one is made aware that within the research and development sector there exisist contradicting point of views concerning the learning potential. It is quite clear that there is a definite need for more research based on cooperation between different scientific mileaus.

- The third reason for the use of media has already been mentioned, namely a fascination with technology. Here we should add that many working at university and college level have reservations about beginning distance education because its association with media are regarded as being so strong. In other words they believe that distance education relies upon the use of advanced technology.

- We have also registered that choice of medium, and maybe especially that of television, is connected to marketing the product. That an institution

has its educational programme broadcast throughout Norway on the National Network perhaps means more than its eventual educational value. There are examples of institutions stressing this aspect as a premise for giving their support to a project.

Figure 1, is a chart showing the *use of technology* by 25 different distance education projects that SOFF has supported. These are mainly the projects that have come furthest with regard to planning and carrying them out.

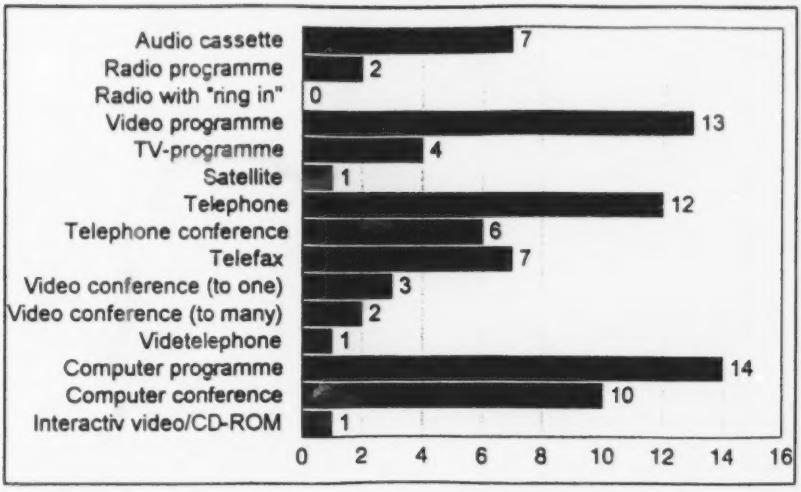


Fig. 1

As can be seen from the chart the various forms of audio, visual and text material have been put to use. Data-programmes, video programmes, telephone and data-conferencing have been used excessively. It is also gratifying to see that relatively simple, but effective medium such as audio-cassettes have been used by many. The chart also verifies SOFF's strategy of putting more weight on the "every-day kind of technology", while at the same time carrying out cautious experiments with media, such as the use of videotelephones and interactive-video/CD-ROM.

In spite of new media's powerful entrance into the field of distance education it is still the printed material that dominates. We can quite honestly say that printed material, here meaning first and foremost textbooks, will have a central position in the years to come. In *figure 2* we have therefore presented

a survey covering the *use of printed material* from the same 25 projects refered to earlier.

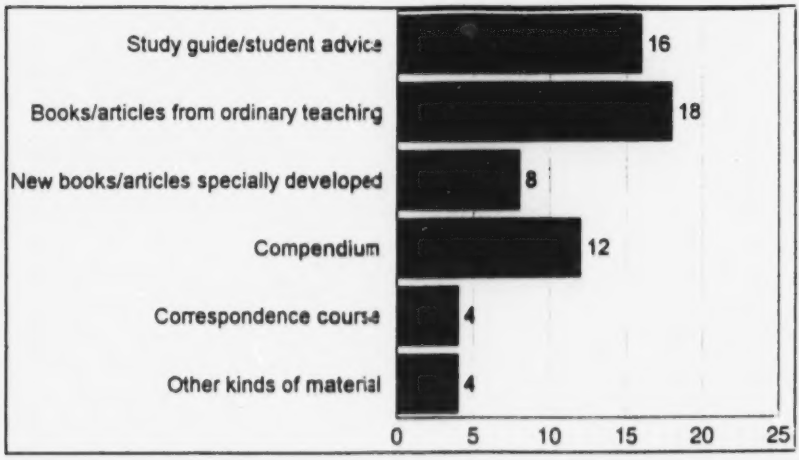


Fig. 2

As can be seen from the survey, study guides and written advice for the students, has a comparatively large position. The study guides are there mainly to help students to integrate the various material the course consists of. It is our experience that such study guides are a great help for distance education students, some even maintain they are of far too great a help!

As part of the evaluation work instigated by SOFF, the question has been raised as to whether there is a tendency in multi-distance education programmes to over- organize and structure the learning situation for the students, and perhaps do them a disservice. The question that this raises is whether the studyguide approach that is used here is one that should be used for all kinds of teaching material? Should the guide mainly contain the presentation of academic contents or should it be presented in such a way that it makes the learning process easier? Is it possible that through such detailed presentation we take away the student's chance of learning how to study? We have noted from the evaluation of one distance education programme that the study guide is so good that it makes it unnecessary to use other text books. This perhaps gives a picture of the well-qualified teacher, but is it necessarily an advantage as far as the student is concerned?

Does it mean that the students need not study anything else, and that the result is almost given to them on a plate?

New Learning Frontiers

Technological media has, so far, opened the possibility of improvement and development in the field of distance education. To be more precise we can say that technology has brought distance education forward from a somewhat anonymous existence and given it a new and exciting potential. We daily experience new and exciting development within technology and education; there is continually better, and cheaper possibilities for direct two-way communication and the integration of audio, visual and text material in a multi-media concept.

One maintains that distance education gives the possibility of limitless learning which can be said to meet the requirements as far as the use of technology is concerned. Technology makes it possible for us to break down a number of traditional boundaries both of a geographical and economical art. Briefly we can say that technology will force us to change our view about how education is organized and taught. The most exciting aspect is that with the help of technology one can break down the established divisions between traditional, institutional basic education and the more flexible, open and life-long learning. There are indications that the future will bring these two teaching forms closer together and that they will melt into one. There are already tendencies of this happening today where for example material made specifically for distance education students is also used by students studying on-campus.

But a premise for such a development is that we can learn to change what we have previously been used to doing and are able to learn how to integrate technology in our plans and perspectives for the future. We must make active use of technology as a tool in our endeavours to establish an educationally rich society where learning and education is part of our life situation. We must break away from what we regard as the normal boundaries or imaginary myths, that say technology has a tendency to duck its ugly head up and threaten the beauty of our civilization, namely our culture, identity and our spiritual life. Instead of a passive, frightening and at times fatalistic opinion about technology's role in our society, we must regard it as the greatest challenge to our ability of establishing a constructive dialogue between technology and culture.

References

Bjørn Pedersen, *Ny spredning av kunnskap*, Aftenposten 225/3-93.

Dahlöf, Grepperud, Palmlund, *Att vilja, våga, kunna*. Umeå Universitetet, Distansrådet, rapport nr. 5, 1993.

Løvold/Østby, *Skjønnheten og udyret*, Dagbladet 10/11-93.

Edvard Befring, *Forskning om fjernundervisning, Forskningsprogram om fjernundervisning*, SEFU 1990.

SOFF, *Fra prosjekt til permanens*, rapport nr. 6 1993.

SOFF, *Det nasjonale kunskapsnettet*, rapport nr. 5, 1993 (English summary: *The National Knowledge Network, Flexible learning in a Norwegian Network*)

NOU 1986:23, *Livslang læring*.

NOU 1988:28, *Med viten og vilje*.

Betænking nr. 1253/93, *Teknologi støttet undervisning* (Fjernundervisning). Undervisningsministeriet, Danmark.

SOU 1993:13, *Kunnskapens Krona*, Utbildningsdep. Sverige.

Notes on Contributors

Leena Ahteenmäki-Pelkonen, ThM, LicEd, Research Assistant, Department of Education, PoBox 39 (Bulevardi 18), FIN-00014 University of Helsinki, Finland. Telephone: int + 358 0 191 8083. Telefax: int + 358 0 191 8073. leena.ahteenmaki-pelkonen@helsinki.fi

Main field of research and interest include self-directed learning, Mezirow's critical transformation theory, systematic analysis, concept analysis, adult learning in supervision, open university and distance teaching.

Marianne Andersson: Cand.Scient.Soc. Researcher at the Danish Research and Development Centre for Adult Education.

Tove Dahl received her Ph.D. from the University of Texas at Austin in Educational Psychology. From 1991 to 1993 she worked as a research associate at the Norwegian Institute of Adult Education (NVI). She is now an Associate Professor of Psychology at the University of Tromsø, Tromsø, Norway. Her research interests include language, learning, cognition and motivation in both theoretical and applied contexts. She is active in an instructional methods group for adult education sponsored by the Nordic Council of Ministers, reviewer for *Teaching and Teacher Education*, and member of several Nordic and international associations concerned with issues of educational psychology. She has also run a Norwegian language institute for 7 to 18 year olds for the Concordia Language Villages in Minnesota, U.S.A. since 1983. Department of Psychology, University of Tromsø, N-9037 Tromsø, Norway. Ph. +47 776 45456 (direct) +47 776 45290 (switchboard) Fax +47 776 45610

Thomas M. Dyekjær: Stud.Polit. Researcher at the Danish Research and Development Centre for Adult Education.

Søren Ehlers, Lecturer at the Research Centre of Adult Education. Main field of research: Popular enlightenment (folkeoplysning) and basic adult education. The Royal Danish School of Educational Studies, Emdrupvej 101, DK-2400 Copenhagen NV, Denmark. Telephone ++ 39 69 66 33. Telefax ++ 39 69 74 74

Paul Gooderham, PhD, associate professor in the Department of Sociology and Political Science, University of Trondheim, 7055 Dragvoll, Norway.
Telephone +73 591704. Main field of research: sociology of adult and continuing education.

Gunnar Grepperud is assistant professor of education at the University of Tromsø. He has worked specifically with teacher education, school management, didactics and school development. Since 1990 he has been Executive Officer for the Norwegian Executive Board for Distance education at University and College Level (SOFF). In

connection with his work at SOFF he has written articles and evaluation about distance education. Address: UNIKOM, University of Tromsø, 9037 Tromsø, Norway. Telephone: +47 776 45 963 Fax: +47 776 45 960.

Kjell Hines, M.Sc., Research Fellow at the Department of Sociology and Political Science, Universtity of Trondheim. Main field of research: political sociology.

Glenn Hultman, PhD, Associate professor, Department of Education and Psychology, Linköping University, S-581 83 Linköping, Sweden. Main fields of research: Change processes in schools and companys, organizations as institutions and cultures, knowledge utilization, the work of teachers and principals.

Steen Høyrup, associate professor at Research Centre of Adult Education at The Royal Danish School of Educational Studies. Current field of research: Organizational and management studies in the public sector, management theory.

Juan Carlos LLorente, MEd, Research Assistant, Department of Education, PoBox 39 (Bulevardi 18), FIN-00014, University of Helsinki, Finland.
Telephone: int + 358 0 191 8061. Telefax: int + 358 0 191 8073.
llorente@bulevardi.helsinki.fi

Field of interest: Adult basic education, learning and cultural context, work-related activities.

Bjørn-Emil Madsen, MSocSc (in psychology), Norwegian Institute of Adult Education (NVI), Jonsvannsveien 82, N-7035 Trondheim, Norway.
Telephone: +73 94 11 00, telefax +73 94 12 22.

Barrieres against completing adult education - motivational factors in participation and drop-out.

Jyri Manninen, Dr, Research Assistant, Department of Education, PoBox 39 (Bulevardi 18), FIN-00014 University of Helsinki , Finland.
Telephone: int + 358 0 1918004. Telefax: int + 358 0 1918073.
JMANNINEN@cc.helsinki.fi

Main field of research and interest include unemployment education and labour market training, individual change processes, adult learning processes, conceptual analysis, and computer mediated communication in distance education.

Henning Salling Olesen. Born 1946. Ass. Prof. in Sociology of Education at Roskilde University, Director of Centre for Adult Education Research. Former Vice-Rector for the University. Publications include *Voksenundervisning - hverdagsliv og erfaring*, Copenhagen 1985, in English *Adult Education and Everyday Life*, Roskilde 1989.

Eero Pantzar, PhD, Ass. Prof. (Adult and continuing education, Head of Department of Education, University of Tampere, P.O. Box 607, SF-33401 Tampere, Finland. Telephone: 312 56 550. Fax: 312 57 502.

Special areas: comparative education, theory of adult education, lifelong learning, educational policy.

Kjell Rubenson, Ph., Professor in adult education at the Department of Education and Psychology, Linköping university, Sweden and at University of British Columbia, Vancouver, Canada.

Main Field of research: Knowledge and democracy, Adult education, sosiology of education.

Roald Sand is undergraduate in sociology at the University of Trondheim.

Camilla Scavenius, PhD student at Research Centre of Adult Education at The Royal Danish School of Educational Studies. Current field of research: Adults as learners, the learning profile of the County Adult Education Centres (VUC).

Per Olof Thång, Associate professor, PhD, Chairman for the Collegium for Adult Education and Learning in Working Life, Department of Education and Educational Research, University of Göteborg. His special interests are in adult education, human resource development and the situation of working persons with a limited education background. Currently engaged in a research and development project about vocational education and human resource development in organizations. Department of Education and Educational Research, University of Göteborg. Box 1010, S-431 26 Mölndal, Sweden. Phone: +46 31 773 24 23. Fax: +46 31 773 24 62.

Lars Ulriksen. Research fellow at the Adult Education Research Group. Roskilde University, P.O.B. 260, DK-4000 Roskilde. Phone: 45 75 77 11.

Bjarne Wahlgren, Ph.D., professor at The Royal Danish School of Educational Studies, Emdrupvej 101, DK 2400 Copenhagen, Denmark. Phone 45 3969 6633, Fax 45 3966 3232. Director of Research Center of Adult Education. Main field of research: the relation between vocational training and general adult education, methodological problems in evaluation research.

Jakob Wandall: Cand.Polit. Researcher at the Danish Research and Development Centre for Adult Education.

Social Changes and Adult Education Research
- Adult Education Research in Nordic Countries 1992/93

The present yearbook: *Adult Education Research in the Nordic Countries 1992/93*, is the third in the series *Social Changes and Adult Education Research*. The primary aim of the yearbooks in this series is to present the most recent and on-going research on adult education to an international audience. This year's book reflects the major trends in research over the last two years.

The primary source for the first two volumes in the series was papers presented at the annual *Nordic Researchers' Conferences in General and Adult Education* which are held at the Nordic Folk Academy, Goteborg Sweden. However, this yearbook does not share a similar association with this researchers' conference. The majority of the articles here have been written by researchers who did not present papers at the most recent conference which was held in June 1993.

As is evident from the table of contents, the largest group of articles concerns vocational adult training aimed at improving the qualifications of the labour force and the population in general. This reflects problems in the labour market which are common to all the Nordic countries. The articles refer to special measures and programmes introduced in the Nordic countries, but the growing importance of adult education with regard to qualification, know-how and job-related education is an international trend. Therefore some articles also look at the international development in this field and place adult education policies in a broader context.

Another group of articles examines adult education issues, centring on the learning processes and such concepts as participation and self-directedness. Another topic area is the drop-out rate of adult education courses in general education.

Two articles focus on the learning process of illiterates and slow learners. One of these articles uses empirical data from Argentina, while the other examines education programmes in Denmark. An article from Norway looks at distance education.

Keywords: Adult education research, Nordic countries.

ISSN 1102-8351
ISBN 82-7262-092-8